

# Keywords in Context for the NAG Fortran 77 Library

Nonlinear convolution Volterra–Abel equation, first kind, weakly singular		D05BEF
Nonlinear convolution Volterra–Abel equation, second kind, weakly singular		D05BDF
Generate weights for use in solving weakly singular Abel-type equations		D05BYF
Calculation of weights and <b>abscissae</b> for Gaussian quadrature rules, general choice of rule		D01BCF
Pre-computed weights and <b>abscissae</b> for Gaussian quadrature rules, restricted choice of rule		D01BBF
Robust estimation, median, median <b>absolute</b> deviation, robust standard deviation		G07DAF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex band matrix		F06UBF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex general matrix		F06UAF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex Hermitian band matrix		F06UEF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex Hermitian matrix		F06UCF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex Hermitian matrix, packed storage		F06UDF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex Hessenberg matrix		F06UMF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex symmetric band matrix		F06UHF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex symmetric matrix		F06UUF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex symmetric matrix, packed storage		F06UGF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex trapezoidal/triangular matrix		F06UJF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex triangular band matrix		F06ULF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, complex triangular matrix, packed storage		F06UKF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real band matrix		F06RBF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real general matrix		F06RAF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real Hessenberg matrix		F06RMF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real symmetric band matrix		F06REF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real symmetric matrix		F06RCF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real symmetric matrix, packed storage		F06RDF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real trapezoidal/triangular matrix		F06RJF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real triangular band matrix		F06RLF
1-norm, $\infty$ -norm, Frobenius norm, largest <b>absolute</b> element, real triangular matrix, packed storage		F06RKF
Elements of real vector with largest and smallest <b>absolute</b> value		F06FLF
Index, real vector element with largest <b>absolute</b> value		F06JLF
Index, complex vector element with largest <b>absolute</b> value		F06JMF
Sum <b>absolute</b> values of complex vector elements		F06JKF
Sum <b>absolute</b> values of real vector elements		F06EKF
<b>Acceleration</b> of convergence of sequence, Shanks' transformation...		C06BAF
Normal scores, <b>accurate</b> values		G01DAF
ODEs, IVP, <b>Adams</b> method, until function of solution is zero,...		D02CJF
ODEs, IVP, <b>Adams</b> method with root-finding (forward communication,...		D02QFF
ODEs, IVP, <b>Adams</b> method with root-finding (reverse communication,...		D02QGF
One-dimensional quadrature, non- <b>adaptive</b> , finite interval		D01BDF
One-dimensional quadrature, <b>adaptive</b> , finite interval, allowing for singularities at...		D01ALF
One-dimensional quadrature, <b>adaptive</b> , finite interval, method suitable for oscillating functions		D01AKF
One-dimensional quadrature, <b>adaptive</b> , finite interval, method suitable for oscillating functions		D01AKF
One-dimensional quadrature, <b>adaptive</b> , finite interval, strategy due to Patterson,...		D01AHF
One-dimensional quadrature, <b>adaptive</b> , finite interval, strategy due to Piessens and de Doncker,...		D01AJF
One-dimensional quadrature, <b>adaptive</b> , finite interval, strategy due to Piessens and de Doncker,...		D01AJF
One-dimensional quadrature, <b>adaptive</b> , finite interval, variant of D01AJF efficient on...		D01ATF
One-dimensional quadrature, <b>adaptive</b> , finite interval, variant of D01AKF on...		D01AUF
One-dimensional quadrature, <b>adaptive</b> , finite interval, weight function $1/(x - c)$ ,...		D01AQF
One-dimensional quadrature, <b>adaptive</b> , finite interval, weight function...		D01ANF
One-dimensional quadrature, <b>adaptive</b> , finite interval, weight function...		D01APF
One-dimensional quadrature, non- <b>adaptive</b> , finite interval with provision for indefinite...		D01ARF
One-dimensional quadrature, <b>adaptive</b> , infinite or semi-infinite interval		D01AMF
Multi-dimensional <b>adaptive</b> quadrature over hyper-rectangle		D01FCF
Multi-dimensional <b>adaptive</b> quadrature over hyper-rectangle, multiple...		D01EAF
One-dimensional quadrature, <b>adaptive</b> , semi-infinite interval, weight function...		D01ASF
<b>Add</b> a new variable to a general linear regression model		G02DEF
<b>Add</b> scalar times complex sparse vector to complex sparse vector		F06GTF
<b>Add</b> scalar times complex vector to complex vector		F06GCF
<b>Add</b> scalar times real sparse vector to real sparse vector		F06ETF
<b>Add</b> scalar times real vector to real vector		F06ECF
<b>Add/delete</b> an observation to/from a general linear regression model		G02DCF
Real inner product added to initial value, basic/ <b>additional</b> precision		X03AAF
Complex inner product added to initial value, basic/ <b>additional</b> precision		X03ABF
Return or set unit number for <b>advisory</b> messages		X04ABF
Airy function $Ai(x)$		S17AGF
Airy function $Ai'(x)$		S17AJF
Airy functions $Ai(z)$ and $Ai'(z)$ , complex $z$		S17DGF
Airy functions $Ai(z)$ and $Ai'(z)$ , complex $z$		S17DGF
Airy function $Ai(x)$		S17AGF
Airy function $Ai'(x)$		S17AJF
Airy function $Bi(x)$		S17AHF
Airy function $Bi'(x)$		S17AKF
Airy functions $Ai(z)$ and $Ai'(z)$ , complex $z$		S17DGF
Airy functions $Bi(z)$ and $Bi'(z)$ , complex $z$		S17DHF
Interpolated values, <b>Aitken's</b> technique, unequally spaced data, one variable		E01AAF
Basic Linear <b>Algebra</b> Subprograms		F06
Differential/ <b>algebraic</b> equations		D02M-N
...problem, shooting and matching technique, subject to extra <b>algebraic</b> equations, general parameters to be determined		D02SAF
Implicit/ <b>algebraic</b> ODEs, stiff IVP, banded Jacobian (comprehensive)		D02NHF
Implicit/ <b>algebraic</b> ODEs, stiff IVP, full Jacobian (comprehensive)		D02NGF
Implicit/ <b>algebraic</b> ODEs, stiff IVP (reverse communication, comprehensive)		D02NNF
Implicit/ <b>algebraic</b> ODEs, stiff IVP, sparse Jacobian (comprehensive)		D02NJF
...finite interval, weight function with end-point singularities of <b>algebraico-logarithmic</b> type		D01APF
<b>Allocates</b> observations to groups according to selected rules...		G03DCF
<i>LU</i> factorization of real <b>almost</b> block diagonal matrix		F01LHF
Solution of real <b>almost</b> block diagonal simultaneous linear equations (coefficient...		F04LHF
Multivariate time series, cross <b>amplitude</b> spectrum, squared coherency, bounds, univariate and...		G13CEF
Performs principal component <b>analysis</b>		G03AAF
Performs canonical variate <b>analysis</b>		G03ACF
Performs canonical correlation <b>analysis</b>		G03ADF
...within-group covariance matrices and matrices for discriminant <b>analysis</b>		G03DAF
Hierarchical cluster <b>analysis</b>		G03ECF
<i>K</i> -means cluster <b>analysis</b>		G03EFF
Performs principal co-ordinate <b>analysis</b> , classical metric scaling		G03FAF

...maximum likelihood estimates of the parameters of a factor	<b>analysis</b> model, factor loadings, communalities and...	G03CAF
Returns parameter estimates for the conditional	<b>analysis</b> of stratified data	G11CAF
	<b>Analysis</b> of variance, complete factorial design, treatment...	G04CAF
	<b>Analysis</b> of variance, general row and column design, treatment...	G04BCF
Two-way	<b>analysis</b> of variance, hierarchical classification, subgroups...	G04AGF
Friedman two-way	<b>analysis</b> of variance on $k$ matched samples	G08AEF
Kruskal-Wallis one-way	<b>analysis</b> of variance on $k$ samples of unequal size	G08AFF
	<b>Analysis</b> of variance, randomized block or completely randomized...	G04BBF
Two-way contingency table	<b>analysis</b> , with $\chi^2$ /Fisher's exact test	G01AFF
	<b>Padé-approximants</b>	E02RAF
	<b>Approximation</b>	E02
	$L_1$ - <b>approximation</b> by general linear function	E02GAF
	$L_\infty$ - <b>approximation</b> by general linear function	E02GCF
	$L_1$ - <b>approximation</b> by general linear function subject to linear...	E02GBF
	<b>Approximation</b> of special functions	S
	arccos $x$	S09ABF
	arccosh $x$	S11ACF
	arcsin $x$	S09AAF
	arcsinh $x$	S11ABF
	arctanh $x$	S11AAF
Univariate time series, preliminary estimation, seasonal	<b>ARIMA</b> model	G13ADF
...time series, state set and forecasts, from fully specified seasonal	<b>ARIMA</b> model	G13AJF
Multivariate time series, filtering (pre-whitening) by an	<b>ARIMA</b> model	G13BAF
Univariate time series, estimation, seasonal	<b>ARIMA</b> model (comprehensive)	G13AEF
Univariate time series, estimation, seasonal	<b>ARIMA</b> model (easy-to-use)	G13AFF
Set up reference vector for univariate	<b>ARMA</b> time series model	G05EGF
Generate next term from reference vector for	<b>ARMA</b> time series model	G05EWF
	<b>ODEs</b> , IVP, error <b>assessment</b> diagnostics for D02PCF and D02PDF	D02PZF
Univariate time series, sample	<b>autocorrelation</b> function	G13ABF
Univariate time series, partial autocorrelations from	<b>autocorrelations</b>	G13ACF
Multivariate time series, multiple squared partial	<b>autocorrelations</b>	G13DBF
Univariate time series, partial	<b>autocorrelations</b> from autocorrelations	G13ACF
Least-squares cubic spline curve fit,	<b>automatic</b> knot placement	E02BEF
Least-squares surface fit by bicubic splines with	<b>automatic</b> knot placement, data on rectangular grid	E02DCF
Least-squares surface fit by bicubic splines with	<b>automatic</b> knot placement, scattered data	E02DDF
Multivariate time series, partial	<b>autoregression</b> matrices	G13DPF
Calculates the zeros of a vector	<b>autoregressive</b> (or moving average) operator	G13DXF
Moving	<b>average</b> See ARMA	
Calculates the zeros of a vector autoregressive (or moving	<b>average</b> ) operator	G13DXF
	<b>Balance</b> complex general matrix	F08NVF
	<b>Balance</b> real general matrix	F08NHF
Transform eigenvectors of real	<b>balanced</b> matrix to those of original matrix supplied to F08NHF	F08NJF
Transform eigenvectors of complex	<b>balanced</b> matrix to those of original matrix supplied to F08NVF	F08NWF
$ULDL^T U^T$ factorization of real symmetric positive-definite	<b>band</b> matrix	F01BUF
Matrix-vector product, real rectangular	<b>band</b> matrix	F06PBF
Matrix-vector product, real symmetric	<b>band</b> matrix	F06PDF
Matrix-vector product, real triangular	<b>band</b> matrix	F06PGF
System of equations, real triangular	<b>band</b> matrix	F06PKF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real	<b>band</b> matrix	F06RBF
...Frobenius norm, largest absolute element, real symmetric	<b>band</b> matrix	F06REF
...Frobenius norm, largest absolute element, real triangular	<b>band</b> matrix	F06RLF
Matrix-vector product, complex rectangular	<b>band</b> matrix	F06SBF
Matrix-vector product, complex Hermitian	<b>band</b> matrix	F06SDF
Matrix-vector product, complex triangular	<b>band</b> matrix	F06SGF
System of equations, complex triangular	<b>band</b> matrix	F06SKF
...Frobenius norm, largest absolute element, complex	<b>band</b> matrix	F06UBF
...Frobenius norm, largest absolute element, complex Hermitian	<b>band</b> matrix	F06UEF
...Frobenius norm, largest absolute element, complex symmetric	<b>band</b> matrix	F06UHF
...Frobenius norm, largest absolute element, complex triangular	<b>band</b> matrix	F06ULF
$LU$ factorization of real $m$ by $n$	<b>band</b> matrix	F07BDF
$LU$ factorization of complex $m$ by $n$	<b>band</b> matrix	F07BRF
Cholesky factorization of real symmetric positive-definite	<b>band</b> matrix	F07HDF
Cholesky factorization of complex Hermitian positive-definite	<b>band</b> matrix	F07HRF
...Cholesky factorization of real symmetric positive-definite	<b>band</b> matrix A	F08UHF
...Cholesky factorization of complex Hermitian positive-definite	<b>band</b> matrix A	F08UTF
Determinant of real symmetric positive-definite	<b>band</b> matrix (Black Box)	F03ACF
Estimate condition number of real	<b>band</b> matrix, matrix already factorized by F07BDF	F07BGF
Estimate condition number of complex	<b>band</b> matrix, matrix already factorized by F07BRF	F07BUF
Estimate condition number of real symmetric positive-definite	<b>band</b> matrix, matrix already factorized by F07HDF	F07HGF
Estimate condition number of complex Hermitian positive-definite	<b>band</b> matrix, matrix already factorized by F07HRF	F07HUF
Unitary reduction of complex Hermitian	<b>band</b> matrix to real symmetric tridiagonal form	F08HSF
Orthogonal reduction of real symmetric	<b>band</b> matrix to symmetric tridiagonal form	F08HEF
Reduction of real rectangular	<b>band</b> matrix to upper bidiagonal form	F08LEF
Reduction of complex rectangular	<b>band</b> matrix to upper bidiagonal form	F08LSF
All eigenvalues and optionally all eigenvectors of real symmetric	<b>band</b> matrix, using divide and conquer	F08HCF
...and optionally all eigenvectors of complex Hermitian	<b>band</b> matrix, using divide and conquer	F08HQF
Refined solution with error bounds of real	<b>band</b> system of linear equations, multiple right-hand sides	F07BHF
Refined solution with error bounds of complex	<b>band</b> system of linear equations, multiple right-hand sides	F07BVF
...solution with error bounds of real symmetric positive-definite	<b>band</b> system of linear equations, multiple right-hand sides	F07HHF
...solution with error bounds of complex Hermitian positive-definite	<b>band</b> system of linear equations, multiple right-hand sides	F07HVF
Solution of real	<b>band</b> system of linear equations, multiple right-hand sides....	F07BEF
Solution of complex	<b>band</b> system of linear equations, multiple right-hand sides....	F07BSF
Solution of real symmetric positive-definite	<b>band</b> system of linear equations, multiple right-hand sides....	F07HEF
Solution of complex Hermitian positive-definite	<b>band</b> system of linear equations, multiple right-hand sides....	F07HSF
Estimate condition number of real	<b>band</b> triangular matrix	F07VGF
Estimate condition number of complex	<b>band</b> triangular matrix	F07VUF
Solution of real	<b>band</b> triangular system of linear equations, multiple right-hand sides	F07VEF
Error bounds for solution of real	<b>band</b> triangular system of linear equations, multiple right-hand sides	F07VHF
Solution of complex	<b>band</b> triangular system of linear equations, multiple right-hand sides	F07VSF
Error bounds for solution of complex	<b>band</b> triangular system of linear equations, multiple right-hand sides	F07VVF
Convert real matrix between packed	<b>banded</b> and rectangular storage schemes	F01ZCF
Convert complex matrix between packed	<b>banded</b> and rectangular storage schemes	F01ZDF
Reduction to standard form, generalized real symmetric-definite	<b>banded</b> eigenproblem	F01BVF
Eigenvector of generalized real	<b>banded</b> eigenproblem by inverse iteration	F02SDF
Reduction of real symmetric-definite	<b>banded</b> generalized eigenproblem $Ax = \lambda Bx$ to standard form...	F08UEF
Reduction of complex Hermitian-definite	<b>banded</b> generalized eigenproblem $Ax = \lambda Bx$ to standard form...	F08USF
Explicit ODEs, stiff IVP,	<b>banded</b> Jacobian (comprehensive)	D02NCF
Implicit/algebraic ODEs, stiff IVP,	<b>banded</b> Jacobian (comprehensive)	D02NHF
ODEs, IVP, for use with D02M-N routines,	<b>banded</b> Jacobian, linear algebra set-up	D02NTF
Print real packed	<b>banded</b> matrix (comprehensive)	X04CFF

Print complex packed	<b>banded matrix (comprehensive)</b>	X04DFE
Print real packed	<b>banded matrix (easy-to-use)</b>	X04CEF
Print complex packed	<b>banded matrix (easy-to-use)</b>	X04DEF
All eigenvalues of generalized	<b>banded real symmetric-definite eigenproblem (Black Box)</b>	F02FHF
Solution of real symmetric positive-definite	<b>banded simultaneous linear equations with multiple right-hand sides...</b>	F04ACF
...to standard form $Cy = \lambda y$ , such that $C$ has the same	<b>bandwidth as <math>A</math></b>	F08UEF
...to standard form $Cy = \lambda y$ , such that $C$ has the same	<b>bandwidth as <math>A</math></b>	F08USF
$LDL^T$ factorization of real symmetric positive-definite variable-	<b>bandwidth matrix</b>	F01MCF
Solution of real symmetric positive-definite variable-	<b>bandwidth simultaneous linear equations (coefficient matrix already...</b>	F04MCF
...time series, smoothed sample spectrum using rectangular,	<b>Bartlett, Tukey or Parzen lag window</b>	G13CAF
...time series, smoothed sample cross spectrum using rectangular,	<b>Bartlett, Tukey or Parzen lag window</b>	G13CCF
Real inner product added to initial value,	<b>basic/additional precision</b>	X03AAF
Complex inner product added to initial value,	<b>basic/additional precision</b>	X03ABF
ODEs, IVP,	<b>BDF method, set-up for D02M-N routines</b>	D02NVF
ODEs, stiff IVP,	<b>BDF method, until function of solution is zero,...</b>	D02EJF
Modified	<b>Bessel function <math>e^{- x }I_0(x)</math></b>	S18CEF
Modified	<b>Bessel function <math>e^{- x }I_1(x)</math></b>	S18CFE
Modified	<b>Bessel function <math>e^xK_0(x)</math></b>	S18CCF
Modified	<b>Bessel function <math>e^xK_1(x)</math></b>	S18CDF
Modified	<b>Bessel function <math>I_0(x)</math></b>	S18AEF
Modified	<b>Bessel function <math>I_1(x)</math></b>	S18AFF
	<b>Bessel function <math>J_0(x)</math></b>	S17AEF
	<b>Bessel function <math>J_1(x)</math></b>	S17AFF
Modified	<b>Bessel function <math>K_0(x)</math></b>	S18ACF
Modified	<b>Bessel function <math>K_1(x)</math></b>	S18ADF
	<b>Bessel function <math>Y_0(x)</math></b>	S17ACF
	<b>Bessel function <math>Y_1(x)</math></b>	S17ADF
Modified	<b>Bessel functions <math>I_{\nu+a}(z)</math>, real <math>a \geq 0</math>, complex <math>z</math>, <math>\nu = 0, 1, 2, \dots</math></b>	S18DEF
	<b>Bessel functions <math>J_{\nu+a}(z)</math>, real <math>a \geq 0</math>, complex <math>z</math>, <math>\nu = 0, 1, 2, \dots</math></b>	S17DEF
Modified	<b>Bessel functions <math>K_{\nu+a}(z)</math>, real <math>a \geq 0</math>, complex <math>z</math>, <math>\nu = 0, 1, 2, \dots</math></b>	S18DCF
	<b>Bessel functions <math>Y_{\nu+a}(z)</math>, real <math>a \geq 0</math>, complex <math>z</math>, <math>\nu = 0, 1, 2, \dots</math></b>	S17DCF
...lower tail probabilities and probability density function for the	<b>beta distribution</b>	G01EEF
Computes deviates for the	<b>beta distribution</b>	G01FEF
Computes probabilities for the non-central	<b>beta distribution</b>	G01GEF
Generates a vector of pseudo-random numbers from a	<b>beta distribution</b>	G05FEF
Airy function	<b>Bi(<math>x</math>)</b>	S17AHF
Airy function	<b>Bi'(<math>x</math>)</b>	S17AKF
Airy functions	<b>Bi(<math>z</math>) and Bi'(<math>z</math>), complex <math>z</math></b>	S17DHF
Airy functions	<b>Bi(<math>z</math>) and Bi'(<math>z</math>), complex <math>z</math></b>	S17DHF
...nonsymmetric linear systems, preconditioned RGMRES, CGS or	<b>Bi-CGSTAB</b>	F11BBF
...real sparse nonsymmetric linear system, RGMRES, CGS or	<b>Bi-CGSTAB method, Jacobi or SSOR preconditioner (Black Box)</b>	F11DEF
...real sparse nonsymmetric linear system, RGMRES, CGS or	<b>Bi-CGSTAB method, preconditioner computed by F11DAF...</b>	F11DCF
...nonsymmetric linear systems, preconditioned RGMRES, CGS,	<b>Bi-CGSTAB or TFQMR method</b>	F11BEF
...non-Hermitian linear systems, preconditioned RGMRES, CGS,	<b>Bi-CGSTAB or TFQMR method</b>	F11BSF
...complex sparse non-Hermitian linear system, RGMRES, CGS,	<b>Bi-CGSTAB or TFQMR method, Jacobi or SSOR preconditioner...</b>	F11DSF
...complex sparse non-Hermitian linear system, RGMRES, CGS,	<b>Bi-CGSTAB or TFQMR method, preconditioner computed by...</b>	F11DQF
Evaluation of fitted	<b>bicubic spline at a mesh of points</b>	E02DFE
Evaluation of fitted	<b>bicubic spline at a vector of points</b>	E02DEF
Interpolating functions, fitting	<b>bicubic spline, data on rectangular grid</b>	E01DAF
Least-squares surface fit,	<b>bicubic splines</b>	E02DAF
Sort two-dimensional data into panels for fitting	<b>bicubic splines</b>	E02ZAF
Least-squares surface fit by	<b>bicubic splines with automatic knot placement, data on...</b>	E02DCF
Least-squares surface fit by	<b>bicubic splines with automatic knot placement, scattered data</b>	E02DDF
Orthogonal reduction of real general rectangular matrix to	<b>bidiagonal form</b>	F08KEF
Unitary reduction of complex general rectangular matrix to	<b>bidiagonal form</b>	F08KSF
Reduction of real rectangular band matrix to upper	<b>bidiagonal form</b>	F08LEF
Reduction of complex rectangular band matrix to upper	<b>bidiagonal form</b>	F08LSF
Generate orthogonal transformation matrices from reduction to	<b>bidiagonal form determined by F08KEF</b>	F08KFF
Apply orthogonal transformations from reduction to	<b>bidiagonal form determined by F08KEF</b>	F08KGF
Generate unitary transformation matrices from reduction to	<b>bidiagonal form determined by F08KSF</b>	F08KTF
Apply unitary transformations from reduction to	<b>bidiagonal form determined by F08KSF</b>	F08KUF
SVD of real	<b>bidiagonal matrix reduced from complex general matrix</b>	F08MSF
SVD of real	<b>bidiagonal matrix reduced from real general matrix</b>	F08MEF
Performs the Cochran $Q$ test on cross-classified	<b>binary data</b>	G08ALF
Contingency table, latent variable model for	<b>binary data</b>	G11SAF
...function, Bus and Dekker algorithm, from given starting value,	<b>binary search for interval</b>	C05AGF
	<b>Binary search for interval containing zero of continuous function...</b>	C05AVF
Set up reference vector for generating pseudo-random integers,	<b>binomial distribution</b>	G05EDF
...reference vector for generating pseudo-random integers, negative	<b>binomial distribution</b>	G05EEF
Computes confidence interval for the parameter of a	<b>binomial distribution</b>	G07AAF
	<b>Binomial distribution function</b>	G01BJF
Fits a generalized linear model with	<b>binomial errors</b>	G02GBF
Selected eigenvalues of real symmetric tridiagonal matrix by	<b>bisection</b>	F08JJF
...amplitude spectrum, squared coherency, bounds, univariate and	<b>bivariate (cross) spectra</b>	G13CEF
Multivariate time series, gain, phase, bounds, univariate and	<b>bivariate (cross) spectra</b>	G13CCF
Computes probability for the	<b>bivariate Normal distribution</b>	G01HAF
	<b>BLAS</b>	F06
ODEs, IVP,	<b>Blend method, set-up for D02M-N routines</b>	D02NVF
$LU$ factorization of real almost	<b>block diagonal matrix</b>	F01LHF
Solution of real almost	<b>block diagonal simultaneous linear equations (coefficient matrix...</b>	F04LHF
Analysis of variance, randomized	<b>block or completely randomized design, treatment means and...</b>	G04BBF
Pseudo-random logical (boolean) value		G05DZF
$n$ th-order linear ODEs,	<b>boundary value problem, collocation and least-squares</b>	D02TGF
ODEs,	<b>boundary value problem, collocation and least-squares,...</b>	D02JAF
ODEs,	<b>boundary value problem, collocation and least-squares,...</b>	D02JBF
ODEs, general nonlinear	<b>boundary value problem, collocation technique</b>	D02TKF
ODEs, general nonlinear	<b>boundary value problem, continuation facility for D02TKF</b>	D02TXF
ODEs, general nonlinear	<b>boundary value problem, diagnostics for D02TKF</b>	D02TZF
ODEs, general nonlinear	<b>boundary value problem, finite difference technique with deferred...</b>	D02RAF
ODEs,	<b>boundary value problem, finite difference technique with deferred...</b>	D02GBF
ODEs,	<b>boundary value problem, finite difference technique with deferred...</b>	D02GAF
ODEs, general nonlinear	<b>boundary value problem, interpolation for D02TKF</b>	D02TYF
ODEs, general nonlinear	<b>boundary value problem, set-up for D02TKF</b>	D02TVF
ODEs,	<b>boundary value problem, shooting and matching, boundary values...</b>	D02HAF
ODEs,	<b>boundary value problem, shooting and matching, general parameters...</b>	D02HBF
ODEs,	<b>boundary value problem, shooting and matching technique,...</b>	D02AGF

ODEs, boundary value problem, shooting and matching,	ODEs, <b>boundary</b> value problem, shooting and matching technique,... <b>boundary</b> values to be determined	D02SAF D02HAF
Error	<b>bounds</b> for solution of complex band triangular system of linear...	F07VVF
Error	<b>bounds</b> for solution of complex triangular system of linear...	F07TVF
Error	<b>bounds</b> for solution of complex triangular system of linear...	F07UVF
Error	<b>bounds</b> for solution of real band triangular system of linear...	F07VHF
Error	<b>bounds</b> for solution of real triangular system of linear...	F07THE
Error	<b>bounds</b> for solution of real triangular system of linear...	F07UHF
Computes	<b>bounds</b> for the significance of a Durbin-Watson statistic	G01EPF
Multivariate time series, noise spectrum,	<b>bounds</b> , impulse response function and its standard error	G13CGF
Refined solution with error	<b>bounds</b> of complex band system of linear equations,...	F07BVF
Refined solution with error	<b>bounds</b> of complex Hermitian indefinite system of linear...	F07MVF
Refined solution with error	<b>bounds</b> of complex Hermitian indefinite system of linear...	F07PVF
Refined solution with error	<b>bounds</b> of complex Hermitian positive-definite band system...	F07HVF
Refined solution with error	<b>bounds</b> of complex Hermitian positive-definite system of linear...	F07FVF
Refined solution with error	<b>bounds</b> of complex Hermitian positive-definite system of linear...	F07GVF
Refined solution with error	<b>bounds</b> of complex symmetric system of linear equations,...	F07NVF
Refined solution with error	<b>bounds</b> of complex symmetric system of linear equations,...	F07QVF
Refined solution with error	<b>bounds</b> of complex system of linear equations,...	F07AVF
Refined solution with error	<b>bounds</b> of real band system of linear equations,...	F07BHF
Refined solution with error	<b>bounds</b> of real symmetric indefinite system of linear...	F07MHF
Refined solution with error	<b>bounds</b> of real symmetric indefinite system of linear...	F07PHF
Refined solution with error	<b>bounds</b> of real symmetric positive-definite band system...	F07HHF
Refined solution with error	<b>bounds</b> of real symmetric positive-definite system of linear...	F07FHF
Refined solution with error	<b>bounds</b> of real symmetric positive-definite system of linear...	F07GHF
Refined solution with error	<b>bounds</b> of real system of linear equations,...	F07AHF
...time series, cross amplitude spectrum, squared coherency,	<b>bounds</b> , univariate and bivariate (cross) spectra	G13CHF
Multivariate time series, gain, phase,	<b>bounds</b> , univariate and bivariate (cross) spectra	G13CFF
...function of several variables, modified Newton algorithm, simple	<b>bounds</b> , using first and second derivatives (comprehensive)	E04LBF
...function of several variables, modified Newton algorithm, simple	<b>bounds</b> , using first and second derivatives (easy-to-use)	E04LVF
...function of several variables, modified Newton algorithm, simple	<b>bounds</b> , using first derivatives (comprehensive)	E04KDF
...function of several variables, quasi-Newton algorithm, simple	<b>bounds</b> , using first derivatives (easy-to-use)	E04KYF
...function of several variables, modified Newton algorithm, simple	<b>bounds</b> , using first derivatives (easy-to-use)	E04KZF
...function of several variables, quasi-Newton algorithm, simple	<b>bounds</b> , using function values only (easy-to-use)	E04JYF
Constructs a	<b>box</b> and whisker plot	G01ASF
General system of first-order PDEs, method of lines, Keller	<b>box</b> discretisation, one space variable	D03PEF
...of first-order PDEs, coupled DAEs, method of lines, Keller	<b>box</b> discretisation, one space variable	D03PKF
...of first-order PDEs, coupled DAEs, method of lines, Keller	<b>box</b> discretisation, remeshing, one space variable	D03PRF
...finite interval, allowing for singularities at user-specified	<b>break-points</b>	D01ALF
...finite/infinite range, eigenvalue only, user-specified	<b>break-points</b>	D02KDF
...finite/infinite range, eigenvalue and eigenfunction, user-specified	<b>break-points</b>	D02KEF
	<b>Broadcast</b> scalar into complex vector	F06HBF
	<b>Broadcast</b> scalar into integer vector	F06DBF
	<b>Broadcast</b> scalar into real vector	F06FBF
	<b>B-splines</b>	E02
	<b>Bunch-Kaufman</b> factorization of complex Hermitian indefinite...	F07MRF
	<b>Bunch-Kaufman</b> factorization of complex Hermitian indefinite...	F07PRF
	<b>Bunch-Kaufman</b> factorization of complex symmetric matrix	F07NRF
	<b>Bunch-Kaufman</b> factorization of complex symmetric matrix,...	F07QRF
	<b>Bunch-Kaufman</b> factorization of real symmetric indefinite matrix...	F07MDF
	<b>Bunch-Kaufman</b> factorization of real symmetric indefinite matrix,...	F07PDF
Zero of continuous function in given interval,	<b>Bus</b> and Dekker algorithm	C05ADF
Zero of continuous function,	<b>Bus</b> and Dekker algorithm, from given starting value,...	C05AGF
Zero in given interval of continuous function by	<b>Bus</b> and Dekker algorithm (reverse communication)	C05AZF
Fresnel integral $C(x)$		S20ADF
Performs	<b>canonical</b> correlation analysis	G03ADF
Performs	<b>canonical</b> variate analysis	G03ACF
Multi-dimensional quadrature over hyper-rectangle, Monte	<b>Carlo</b> method	D01GBF
Elliptic PDE, Helmholtz equation, three-dimensional	<b>Cartesian</b> co-ordinates	D03FAF
Pseudo-random real numbers,	<b>Cauchy</b> distribution	G05DFF
...quadrature, adaptive, finite interval, weight function $1/(x - c)$ ,	<b>Cauchy</b> principal value (Hilbert transform)	D01AQF
...for parameters of the Normal distribution from grouped and/or	<b>censored</b> data	G07BBF
Regression using ranks, right-	<b>censored</b> data	G08RBF
Computes probabilities for the non-	<b>central</b> beta distribution	G01GEF
Computes probabilities for the non-	<b>central</b> $\chi^2$ distribution	G01GCF
Computes lower tail probability for a linear combination of	( <b>central</b> ) $\chi^2$ variables	G01JDF
Computes probabilities for the non-	<b>central</b> $F$ -distribution	G01GDF
Computes probabilities for the non-	<b>central</b> Student's $t$ -distribution	G01GBF
...sparse nonsymmetric linear systems, preconditioned RGMRES,	<b>CGS</b> , Bi-CGSTAB or TFQMR method	F11BBF
...sparse non-Hermitian linear systems, preconditioned RGMRES,	<b>CGS</b> , Bi-CGSTAB or TFQMR method	F11BSF
Solution of complex sparse non-Hermitian linear system, RGMRES,	<b>CGS</b> , Bi-CGSTAB or TFQMR method, Jacobi or SSOR...	F11DSF
Solution of complex sparse non-Hermitian linear system, RGMRES,	<b>CGS</b> , Bi-CGSTAB or TFQMR method, preconditioner...	F11DQF
...sparse nonsymmetric linear systems, preconditioned RGMRES,	<b>CGS</b> or Bi-CGSTAB	F11BBF
Solution of real sparse nonsymmetric linear system, RGMRES,	<b>CGS</b> or Bi-CGSTAB method, Jacobi or SSOR preconditioner...	F11DEF
Solution of real sparse nonsymmetric linear system, RGMRES,	<b>CGS</b> or Bi-CGSTAB method, preconditioner computed by F11DAF...	F11DCF
Sort a vector,	<b>character</b> data	M01CCF
Rank a vector,	<b>character</b> data	M01DCF
Rearrange a vector according to given ranks,	<b>character</b> data	M01ECF
Convert array of integers representing date and time to	<b>character</b> string	X05ABF
Compare two	<b>character</b> strings representing date and time	X05ACF
General system of parabolic PDEs, method of lines,	<b>Chebyshev</b> $C^0$ collocation, one space variable	D03PDF
General system of parabolic PDEs, coupled DAEs, method of lines,	<b>Chebyshev</b> $C^0$ collocation, one space variable	D03PJF
Sum of a	<b>Chebyshev</b> series	C06DBF
Derivative of fitted polynomial in	<b>Chebyshev</b> series form	E02AHF
Integral of fitted polynomial in	<b>Chebyshev</b> series form	E02AJF
Evaluation of fitted polynomial in one variable, from	<b>Chebyshev</b> series form	E02AKF
Evaluation of fitted polynomial in one variable from	<b>Chebyshev</b> series form (simplified parameter list)	E02AEF
	<b>Check</b> initial grid data in D03RBF	D03RYF
	<b>Check</b> user's routine for calculating first derivatives	C05ZAF
	<b>Check</b> user's routine for calculating first derivatives of function	E04HCF
	<b>Check</b> user's routine for calculating Hessian of a sum of squares	E04YBF
	<b>Check</b> user's routine for calculating Jacobian of first derivatives	E04YAF
	<b>Check</b> user's routine for calculating second derivatives of function	E04HDF
	<b>Check</b> user's routines for calculating first derivatives of function...	E04ZCF
	<b>Check</b> validity of a permutation	M01ZBF
Univariate time series, diagnostic	<b>checking</b> of residuals, following G13AEF or G13AFF	G13ASF
Multivariate time series, diagnostic	<b>checking</b> of residuals, following G13DCF	G13DSF

Real sparse symmetric matrix, incomplete	<b>Cholesky</b> factorization	F11JAF
Complex sparse Hermitian matrix, incomplete	<b>Cholesky</b> factorization	F11JNF
	<b>Cholesky</b> factorization of complex Hermitian positive-definite band...	F07HRF
Computes a split	<b>Cholesky</b> factorization of complex Hermitian positive-definite band...	F08UTF
	<b>Cholesky</b> factorization of complex Hermitian positive-definite...	F07FRF
	<b>Cholesky</b> factorization of complex Hermitian positive-definite...	F07GRF
	<b>Cholesky</b> factorization of real symmetric positive-definite band...	F07HDF
Computes a split	<b>Cholesky</b> factorization of real symmetric positive-definite band...	F08UUF
	<b>Cholesky</b> factorization of real symmetric positive-definite matrix	F07FDF
	<b>Cholesky</b> factorization of real symmetric positive-definite matrix,...	F07GDF
	<b>Circular</b> convolution or correlation of two complex vectors	C06PKF
	<b>Circular</b> convolution or correlation of two real vectors, extra...	C06FKF
	<b>Circular</b> convolution or correlation of two real vectors, no extra...	C06EKF
Performs principal co-ordinate analysis, classical metric scaling		G03FAF
Computes multiway table from set of	<b>classification</b> factors using given percentile/quantile	G11BBF
Computes multiway table from set of	<b>classification</b> factors using selected statistic	G11BAF
Two-way analysis of variance, hierarchical	<b>classification</b> , subgroups of unequal size	G04AGF
Computes orthogonal polynomials or dummy variables for factor/	<b>classification</b> variable	G04EAF
Performs the Cochran $Q$ test on cross-	<b>classified</b> binary data	G08ALF
Interpolating functions, method of Renka and	<b>Cline</b> , two variables	E01SAF
	<b>Close</b> file associated with given unit number	X04ADF
	Hierarchical <b>cluster</b> analysis	G03ECF
	$K$ -means <b>cluster</b> analysis	G03EFF
	Computes <b>cluster</b> indicator variable (for use after G03ECF)	G03EJF
Jacobian elliptic functions sn, cn and dn		S21CAF
Performs the Cochran $Q$ test on cross-	<b>classified</b> binary data	G08ALF
	Kendall's <b>coefficient</b> of concordance	G08DAF
	Correlation-like <b>coefficients</b> (about zero), all variables, casewise treatment...	G02BEF
	Correlation-like <b>coefficients</b> (about zero), all variables, no missing values	G02BDF
	Correlation-like <b>coefficients</b> (about zero), all variables, pairwise treatment...	G02BFF
	Correlation-like <b>coefficients</b> (about zero), subset of variables, casewise...	G02BLF
	Correlation-like <b>coefficients</b> (about zero), subset of variables, no missing values	G02BKF
	Correlation-like <b>coefficients</b> (about zero), subset of variables, pairwise treatment...	G02BMF
Pearson product-moment correlation	<b>coefficients</b> , all variables, casewise treatment...	G02BBF
Pearson product-moment correlation	<b>coefficients</b> , all variables, no missing values	G02BAF
Pearson product-moment correlation	<b>coefficients</b> , all variables, pairwise treatment...	G02BCF
Kendall/Spearman non-parametric rank correlation	<b>coefficients</b> , casewise treatment of missing values, overwriting...	G02BPF
Kendall/Spearman non-parametric rank correlation	<b>coefficients</b> , casewise treatment of missing values, preserving...	G02BRF
Computes factor score	<b>coefficients</b> (for use after G03CAF)	G03CCF
Korobov optimal	<b>coefficients</b> for use in D01GCF or D01GDF, when number of...	D01GYF
Korobov optimal	<b>coefficients</b> for use in D01GCF or D01GDF, when number of...	D01GZF
Kendall/Spearman non-parametric rank correlation	<b>coefficients</b> , no missing values, overwriting input data	G02BNF
Kendall/Spearman non-parametric rank correlation	<b>coefficients</b> , no missing values, preserving input data	G02BQF
Kendall/Spearman non-parametric rank correlation	<b>coefficients</b> , pairwise treatment of missing values	G02BSF
Pearson product-moment correlation	<b>coefficients</b> , subset of variables, casewise treatment of missing values	G02BHF
Pearson product-moment correlation	<b>coefficients</b> , subset of variables, no missing values	G02BGF
Pearson product-moment correlation	<b>coefficients</b> , subset of variables, pairwise treatment of missing values	G02BJF
Multiple linear regression, from correlation	<b>coefficients</b> , with constant term	G02CGF
Multiple linear regression, from correlation-like	<b>coefficients</b> , without constant term	G02CHF
Multivariate time series, cross amplitude spectrum, squared	<b>coherency</b> , bounds, univariate and bivariate (cross) spectra	G13CEF
$n$ th-order linear ODEs, boundary value problem,	<b>collocation</b> and least-squares	D02TGF
ODEs, boundary value problem,	<b>collocation</b> and least-squares, single $n$ th-order linear equation	D02JAF
ODEs, boundary value problem,	<b>collocation</b> and least-squares, system of first-order linear equations	D02JBF
General system of parabolic PDEs, method of lines, Chebyshev $C^0$	<b>collocation</b> , one space variable	D03PDF
...parabolic PDEs, coupled DAEs, method of lines, Chebyshev $C^0$	<b>collocation</b> , one space variable	D03PJF
ODEs, general nonlinear boundary value problem,	<b>collocation</b> technique	D02TKF
Analysis of variance, general row and	<b>column</b> design, treatment means and standard errors	G04BCF
$QR$ factorization of real general rectangular matrix with	<b>column</b> pivoting	F08BEF
$QR$ factorization of complex general rectangular matrix with	<b>column</b> pivoting	F08BSF
Print IP or LP solutions with user specified names for rows and	<b>columns</b>	H02BVF
Permute rows or	<b>columns</b> , complex rectangular matrix, permutations represented by...	F06VKF
Permute rows or	<b>columns</b> , complex rectangular matrix, permutations represented by...	F06VJF
Rank	<b>columns</b> of a matrix, integer numbers	M01DKF
Rank	<b>columns</b> of a matrix, real numbers	M01DJF
Permute rows or	<b>columns</b> , real rectangular matrix, permutations represented by...	F06QKF
Permute rows or	<b>columns</b> , real rectangular matrix, permutations represented by...	F06QJF
...of the parameters of a factor analysis model, factor loadings,	<b>communalities</b> and residual correlations	G03CAF
	<b>Compare</b> two character strings representing date and time	X05ACF
	<b>Complement</b> of cumulative normal distribution function $Q(x)$	S15ACF
Scaled complex	<b>complement</b> of error function, $\exp(-z^2)\operatorname{erfc}(-iz)$	S15DDF
	<b>Complement</b> of error function $\operatorname{erfc}(x)$	S15ADF
Analysis of variance, <b>complete</b> factorial design, treatment means and standard errors		G04CAF
$QR$ factorization of	<b>complex</b> general rectangular matrix with column pivoting	F08BSF
Solution of	<b>complex</b> linear system involving incomplete Cholesky...	F11JPF
Solution of	<b>complex</b> linear system involving incomplete $LU$ ...	F11DPF
Kendall's coefficient of	<b>concordance</b>	G08DAF
Norm estimation (for use in	<b>condition</b> estimation), complex matrix	F04ZCF
Norm estimation (for use in	<b>condition</b> estimation), real matrix	F04YCF
Estimate	<b>condition</b> number of complex band matrix, matrix already...	F07BUF
Estimate	<b>condition</b> number of complex band triangular matrix	F07VUF
Estimate	<b>condition</b> number of complex Hermitian indefinite matrix, matrix...	F07MUF
Estimate	<b>condition</b> number of complex Hermitian indefinite matrix,...	F07PUF
Estimate	<b>condition</b> number of complex Hermitian positive-definite band...	F07HUF
Estimate	<b>condition</b> number of complex Hermitian positive-definite matrix,...	F07FUF
Estimate	<b>condition</b> number of complex Hermitian positive-definite matrix,...	F07GUF
Estimate	<b>condition</b> number of complex matrix, matrix already...	F07AUF
Estimate	<b>condition</b> number of complex symmetric matrix, matrix already...	F07NUF
Estimate	<b>condition</b> number of complex symmetric matrix, matrix already...	F07QUF
Estimate	<b>condition</b> number of complex triangular matrix	F07TUF
Estimate	<b>condition</b> number of complex triangular matrix, packed storage	F07UUF
Estimate	<b>condition</b> number of real band matrix, matrix already...	F07BGF
Estimate	<b>condition</b> number of real band triangular matrix	F07VGF
Estimate	<b>condition</b> number of real matrix, matrix already factorized...	F07AGF
Estimate	<b>condition</b> number of real symmetric indefinite matrix, matrix...	F07MGF

Estimate	<b>condition</b> number of real symmetric indefinite matrix, matrix...	F07PGF
Estimate	<b>condition</b> number of real symmetric positive-definite band matrix,...	F07HGF
Estimate	<b>condition</b> number of real symmetric positive-definite matrix,...	F07FGF
Estimate	<b>condition</b> number of real symmetric positive-definite matrix,...	F07GGF
Estimate	<b>condition</b> number of real triangular matrix	F07TGF
Estimate	<b>condition</b> number of real triangular matrix, packed storage	F07UGF
Returns parameter estimates for the	<b>conditional</b> analysis of stratified data	G11CAF
Unconstrained minimum, pre-	<b>conditioned</b> conjugate gradient algorithm, function of several...	E04DGF
...for a difference in means between two Normal populations,	<b>confidence</b> interval	G07CAF
Computes	<b>confidence</b> interval for the parameter of a binomial distribution	G07AAF
Computes	<b>confidence</b> interval for the parameter of a Poisson distribution	G07ABF
Computes	<b>confidence</b> intervals for differences between means computed...	G04DBF
Robust	<b>confidence</b> intervals, one-sample	G07EAF
Robust	<b>confidence</b> intervals, two-sample	G07EBF
Unconstrained minimum, pre-	<b>conditioned</b> conjugate gradient algorithm, function of several variables using...	E04DGF
Real sparse symmetric linear systems, pre-	<b>conditioned</b> conjugate gradient or Lanczos	F11GBF
Solution of real sparse symmetric linear system,	<b>conjugate</b> gradient/Lanczos method, Jacobi or SSOR...	F11JEF
Solution of complex sparse Hermitian linear system,	<b>conjugate</b> gradient/Lanczos method, Jacobi or SSOR...	F11JSF
Solution of real sparse symmetric linear system,	<b>conjugate</b> gradient/Lanczos method, preconditioner computed...	F11JCF
Solution of complex sparse Hermitian linear system,	<b>conjugate</b> gradient/Lanczos method, preconditioner computed...	F11JQF
Complex	<b>conjugate</b> of complex sequence	C06GCF
Complex	<b>conjugate</b> of Hermitian sequence	C06GBF
Complex	<b>conjugate</b> of multiple Hermitian sequences	C06GQF
...equation $AX + XB = C$ , $A$ and $B$ are upper triangular or	<b>conjugate-transposes</b>	F08QVF
Dot product of two complex vectors,	<b>conjugated</b>	F06GBF
Dot product of two complex sparse vector,	<b>conjugated</b>	F06GSF
Rank-1 update, complex rectangular matrix,	<b>conjugated</b> vector	F06SNF
General system of convection-diffusion PDEs with source terms in	<b>conservative</b> form, coupled DAEs, method of lines, upwind scheme...	D03PLF
General system of convection-diffusion PDEs with source terms in	<b>conservative</b> form, coupled DAEs, method of lines, upwind scheme...	D03PSF
Roe's approximate Riemann solver for Euler equations in	<b>conservative</b> form, for use with D03PFF, D03PLF and D03PSF	D03PUF
Osher's approximate Riemann solver for Euler equations in	<b>conservative</b> form, for use with D03PFF, D03PLF and D03PSF	D03PVF
Modified HLL Riemann solver for Euler equations in	<b>conservative</b> form, for use with D03PFF, D03PLF and D03PSF	D03PMF
Exact Riemann Solver for Euler equations in	<b>conservative</b> form, for use with D03PFF, D03PLF and D03PSF	D03PXF
General system of convection-diffusion PDEs with source terms in	<b>conservative</b> form, method of lines, upwind scheme using...	D03PFF
Provides the mathematical	<b>constant</b> $\gamma$ (Euler's Constant)	X01ABF
Provides the mathematical	<b>constant</b> $\pi$	X01AAF
Machine	<b>Constants</b>	X02
Mathematical	<b>Constants</b>	X01
Least-squares polynomial fit, values and derivatives may be	<b>constrained</b> , arbitrary data points	E02AGF
Equality-	<b>constrained</b> complex linear least-squares problem	F04KMF
Convex QP problem or linearly-	<b>constrained</b> linear least-squares problem (dense)	E04NCF
Equality-	<b>constrained</b> real linear least-squares problem	F04JMF
...by general linear function subject to linear inequality	<b>constraints</b>	E02GBF
...user's routines for calculating first derivatives of function and	<b>constraints</b>	E04ZCF
...of parameters of a general linear regression model for given	<b>constraints</b>	G02DKF
...of parameters of a general linear model for given	<b>constraints</b>	G02KGF
Minimum of a sum of squares, nonlinear	<b>constraints</b> , sequential QP method, using function values and...	E04UNF
...function of several variables, sequential QP method, nonlinear	<b>constraints</b> , using function values and optionally first derivatives...	E04UCF
...function of several variables, sequential QP method, nonlinear	<b>constraints</b> , using function values and optionally first derivatives...	E04UFF
$\chi^2$ statistics for two-way	<b>contingency</b> table	G11AAF
Two-way	<b>contingency</b> table analysis, with $\chi^2$ /Fisher's exact test	G01AFF
	<b>Contingency</b> table, latent variable model for binary data	G11SAF
ODEs, IVP, set-up for	<b>continuation</b> calls to integrator, for use with D02M-N routines	D02NZF
...problem, finite difference technique with deferred correction,	<b>continuation</b> facility	D02RAF
ODEs, general nonlinear boundary value problem,	<b>continuation</b> facility for D02TKF	D02TXF
Zero of continuous function,	<b>continuation</b> method, from a given starting value	C05AJF
Zero of continuous function by	<b>continuation</b> method, from given starting value...	C05AXF
Performs the $\chi^2$ goodness of fit test, for standard	<b>continuous</b> distributions	G08CGF
Zero of	<b>continuous</b> function, Bus and Dekker algorithm, from given...	C05AGF
Zero in given interval of	<b>continuous</b> function by Bus and Dekker algorithm (reverse...	C05AZF
Zero of	<b>continuous</b> function by continuation method, from given starting value...	C05AXF
Zero of	<b>continuous</b> function, continuation method, from a given starting value	C05AJF
Zero of	<b>continuous</b> function in given interval, Bus and Dekker algorithm	C05ADF
Binary search for interval containing zero of	<b>continuous</b> function (reverse communication)	C05AVF
Computes sum of squares for	<b>contrast</b> between means	G04DAF
General system of	<b>convection-diffusion</b> PDEs with source terms in conservative form,...	D03PLF
General system of	<b>convection-diffusion</b> PDEs with source terms in conservative form,...	D03PSF
General system of	<b>convection-diffusion</b> PDEs with source terms in conservative form,...	D03PFF
	<b>Convert</b> array of integers representing date and time to character...	X05ABF
	<b>Convert</b> complex matrix between packed banded and rectangular...	F01ZDF
	<b>Convert</b> complex matrix between packed triangular and square...	F01ZBF
	<b>Convert</b> Hermitian sequences to general complex sequences	C06GSF
	<b>Convert</b> real matrix between packed banded and rectangular...	F01ZCF
	<b>Convert</b> real matrix between packed triangular and square...	F01ZAF
	<b>Convex</b> QP problem or linearly-constrained linear least-squares...	E04NCF
Nonlinear Volterra	<b>convolution</b> equation, second kind	D05BAF
Circular	<b>convolution</b> or correlation of two complex vectors	C06PKF
Circular	<b>convolution</b> or correlation of two real vectors, extra workspace...	C06FKF
Circular	<b>convolution</b> or correlation of two real vectors, no extra workspace	C06EKF
Nonlinear	<b>convolution</b> Volterra-Abel equation, first kind, weakly singular	D05BEF
Nonlinear	<b>convolution</b> Volterra-Abel equation, second kind, weakly singular	D05BDF
Matrix	<b>copy</b> , complex rectangular or trapezoidal matrix	F06TFF
	<b>Copy</b> complex vector	F06GFF
	<b>Copy</b> integer vector	F06DFE
Matrix	<b>copy</b> , real rectangular or trapezoidal matrix	F06QFF
	<b>Copy</b> real vector	F06EFF
	<b>Copy</b> real vector to complex vector	F06KFF
...value problem, finite difference technique with deferred	<b>correction</b> , continuation facility	D02RAF
...value problem, finite difference technique with deferred	<b>correction</b> , general linear problem	D02GBF
...value problem, finite difference technique with deferred	<b>correction</b> , simple nonlinear problem	D02BAF
Performs canonical	<b>correlation</b> analysis	G03ADF
Computes (optionally weighted)	<b>correlation</b> and covariance matrices	G02BXF
Pearson product-moment	<b>correlation</b> coefficients, all variables, casewise treatment of missing...	G02BBF
Pearson product-moment	<b>correlation</b> coefficients, all variables, no missing values	G02BAF

	Pearson product-moment	<b>correlation</b> coefficients, all variables, pairwise treatment of missing...	G02BCF
Kendall/Spearman non-parametric rank		<b>correlation</b> coefficients, casewise treatment of missing values,...	G02BPF
Kendall/Spearman non-parametric rank		<b>correlation</b> coefficients, casewise treatment of missing values,...	G02BRF
Kendall/Spearman non-parametric rank		<b>correlation</b> coefficients, no missing values, overwriting input data	G02BNF
Kendall/Spearman non-parametric rank		<b>correlation</b> coefficients, no missing values, preserving input data	G02BQF
Kendall/Spearman non-parametric rank		<b>correlation</b> coefficients, pairwise treatment of missing values	G02BSF
Pearson product-moment		<b>correlation</b> coefficients, subset of variables, casewise treatment of...	G02BHF
Pearson product-moment		<b>correlation</b> coefficients, subset of variables, no missing values	G02BGF
Pearson product-moment		<b>correlation</b> coefficients, subset of variables, pairwise treatment of...	G02BJF
Multiple linear regression, from		<b>correlation</b> coefficients, with constant term	G02CGF
Multivariate time series, sample partial lag		<b>correlation</b> matrices, $\chi^2$ statistics and significance levels	G13DNF
Computes random		<b>correlation</b> matrix	G05GBF
Computes a		<b>correlation</b> matrix from a sum of squares matrix	G02BWF
Calculates a robust estimation of a		<b>correlation</b> matrix, Huber's weight function	G02HKF
Calculates a robust estimation of a		<b>correlation</b> matrix, user-supplied weight function	G02HMF
Calculates a robust estimation of a		<b>correlation</b> matrix, user-supplied weight function plus derivatives	G02HLF
Circular convolution or		<b>correlation</b> of two complex vectors	C06PKF
Circular convolution or		<b>correlation</b> of two real vectors, extra workspace for greater speed	C06KFF
Circular convolution or		<b>correlation</b> of two real vectors, no extra workspace	C06KEF
Multivariate time series, sample cross-		<b>correlation</b> or cross-covariance matrices	G13DMF
		<b>Correlation-like</b> coefficients (about zero), all variables, casewise...	G02BEF
		<b>Correlation-like</b> coefficients (about zero), all variables, no missing...	G02BDF
		<b>Correlation-like</b> coefficients (about zero), all variables, pairwise...	G02BFF
		<b>Correlation-like</b> coefficients (about zero), subset of variables,...	G02BLF
		<b>Correlation-like</b> coefficients (about zero), subset of variables,...	G02BKF
		<b>Correlation-like</b> coefficients (about zero), subset of variables,...	G02BMF
Multiple linear regression, from		<b>correlation-like</b> coefficients, without constant term	G02CHF
...analysis model, factor loadings, communalities and residual		<b>correlations</b>	G03CAF
Multivariate time series, cross-		<b>correlations</b>	G13BCF
Computes partial correlation/variance-covariance matrix from		<b>correlation/variance-covariance</b> matrix computed by G02BXF	G02BYF
The largest permissible argument for sin and		<b>cos</b>	X02AHF
		<b>cosh</b> $x$	S10ACF
Generate complex plane rotation, storing tangent, real		<b>cosine</b>	F06CAF
Recover cosine and sine from given complex tangent, real		<b>cosine</b>	F06CCF
...sequence of plane rotations, complex rectangular matrix, real		<b>cosine</b> and complex sine	F06TYF
...sequence of plane rotations, complex rectangular matrix, complex		<b>cosine</b> and real sine	F06VXF
...sequence of plane rotations, complex rectangular matrix, real		<b>cosine</b> and sine	F06VXF
Recover		<b>cosine</b> and sine from given complex tangent, real cosine	F06CCF
Recover		<b>cosine</b> and sine from given complex tangent, real sine	F06CDF
Recover		<b>cosine</b> and sine from given real tangent	F06BCF
		<b>Cosine</b> integral $Ci(x)$	S13ACF
Compute		<b>cosine</b> of angle between two real vectors	F06FAF
Discrete		<b>cosine</b> transform	C06HBF
Discrete quarter-wave		<b>cosine</b> transform	C06HDF
Discrete		<b>cosine</b> transform (easy-to-use)	C06RBF
Discrete quarter-wave		<b>cosine</b> transform (easy-to-use)	C06RDF
General system of parabolic PDEs,		<b>coupled</b> DAEs, method of lines, Chebyshev $C^0$ collocation,...	D03PJF
General system of parabolic PDEs,		<b>coupled</b> DAEs, method of lines, finite differences, one space variable	D03PHF
General system of parabolic PDEs,		<b>coupled</b> DAEs, method of lines, finite differences, remeshing,...	D03PPF
General system of first-order PDEs,		<b>coupled</b> DAEs, method of lines, Keller box discretisation,...	D03PKF
General system of first-order PDEs,		<b>coupled</b> DAEs, method of lines, Keller box discretisation,...	D03PRF
...PDEs with source terms in conservative form,		<b>coupled</b> DAEs, method of lines, upwind scheme using numerical flux...	D03PLF
...PDEs with source terms in conservative form,		<b>coupled</b> DAEs, method of lines, upwind scheme using numerical flux...	D03PSF
...one iteration of Kalman filter, time-varying, square root		<b>covariance</b> filter	G13EAF
...one iteration of Kalman filter, time-invariant, square root		<b>covariance</b> filter	G13EBF
Computes (optionally weighted) correlation and		<b>covariance</b> matrices	G02BXF
Multivariate time series, sample cross-correlation or cross-		<b>covariance</b> matrices	G13DMF
Computes test statistic for equality of within-group		<b>covariance</b> matrices and matrices for discriminant analysis	G03DAF
...Mahalanobis squared distances for group or pooled variance-		<b>covariance</b> matrices (for use after G03DAF)	G03DBF
Normal scores, approximate variance-		<b>covariance</b> matrix	G01DCF
...correlation/variance-covariance matrix from correlation/variance-		<b>covariance</b> matrix computed by G02BXF	G02BYF
Robust regression, variance-		<b>covariance</b> matrix following G02HDF	G02HFF
		<b>Covariance</b> matrix for linear least-squares problems, $m$ real...	F04YAF
		<b>Covariance</b> matrix for nonlinear least-squares problem...	E04YCF
Computes partial correlation/variance-		<b>covariance</b> matrix from correlation/variance-covariance matrix...	G02BYF
Creates the risk sets associated with the		<b>Cox</b> proportional hazards model for fixed covariates	G12ZAF
Fits		<b>Cox's</b> proportional hazard model	G12BAF
Return the		<b>CPU</b> time	X05BAF
Multivariate time series,		<b>cross</b> amplitude spectrum, squared coherency, bounds, univariate...	G13CEF
...squared coherency, bounds, univariate and bivariate		<b>(cross)</b> spectra	G13CEF
...time series, gain, phase, bounds, univariate and bivariate		<b>(cross)</b> spectra	G13CFE
Multivariate time series, smoothed sample		<b>cross</b> spectrum using rectangular, Bartlett, Tukey or Parzen lag...	G13CCF
Multivariate time series, smoothed sample		<b>cross</b> spectrum using spectral smoothing by the trapezium...	G13CDF
Performs the Cochran $Q$ test on		<b>cross-classified</b> binary data	G08ALF
Multivariate time series, sample		<b>cross-correlation</b> or cross-covariance matrices	G13DMF
Multivariate time series,		<b>cross-correlations</b>	G13BCF
Multivariate time series, sample cross-correlation or		<b>cross-covariance</b> matrices	G13DMF
Inverse Laplace transform,		<b>Crump's</b> method	C06LAF
Interpolating functions, monotonicity-preserving, piecewise		<b>cubic</b> Hermite, one variable	E01BEF
Fit		<b>cubic</b> smoothing spline, smoothing parameter estimated	G10ACF
Fit		<b>cubic</b> smoothing spline, smoothing parameter given	G10ABF
Least-squares		<b>cubic</b> spline curve fit, automatic knot placement	E02BEF
Evaluation of fitted		<b>cubic</b> spline, definite integral	E02BDF
Least-squares curve		<b>cubic</b> spline fit (including interpolation)	E02BAF
Evaluation of fitted		<b>cubic</b> spline, function and derivatives	E02BCF
Evaluation of fitted		<b>cubic</b> spline, function only	E02BBF
Interpolating functions,		<b>cubic</b> spline interpolant, one variable	E01BAF
		<b>Cumulants</b> and moments of quadratic forms in Normal variables	G01NAF
Set up reference vector from supplied		<b>cumulative</b> distribution function or probability distribution function	G05EXF
		<b>Cumulative</b> normal distribution function $P(x)$	S15ABF
Complement of		<b>cumulative</b> normal distribution function $Q(x)$	S15ACF
Least-squares		<b>curve</b> cubic spline fit (including interpolation)	E02BAF
Least-squares cubic spline		<b>curve</b> fit, automatic knot placement	E02BEF
Minimax		<b>curve</b> fit by polynomials	E02ACF
Least-squares		<b>curve</b> fit, by polynomials, arbitrary data points	E02ADF

General system of parabolic PDEs, coupled	<b>DAEs</b> , method of lines, Chebyshev $C^0$ collocation, one space variable	D03PJF
General system of parabolic PDEs, coupled	<b>DAEs</b> , method of lines, finite differences, one space variable	D03PHF
General system of parabolic PDEs, coupled	<b>DAEs</b> , method of lines, finite differences, remeshing, one space variable	D03PPF
General system of first-order PDEs, coupled	<b>DAEs</b> , method of lines, Keller box discretisation, one space variable	D03PKF
General system of first-order PDEs, coupled	<b>DAEs</b> , method of lines, Keller box discretisation, remeshing,...	D03PRF
...PDEs with source terms in conservative form, coupled	<b>DAEs</b> , method of lines, upwind scheme using numerical flux...	D03PLF
...PDEs with source terms in conservative form, coupled	<b>DAEs</b> , method of lines, upwind scheme using numerical flux...	D03PSF
...using spectral smoothing by the trapezium frequency	(Daniell) window	G13CBF
...using spectral smoothing by the trapezium frequency	(Daniell) window	G13CDF
	ODEs, IVP, <b>DASSL</b> method, set-up for D02M–N routines	D02MVF
Compare two character strings representing	<b>date</b> and time	X05ACF
	Return <b>date</b> and time as an array of integers	X05AAF
Convert array of integers representing	<b>date</b> and time to character string	X05ABF
	Mood's and <b>David's</b> tests on two samples of unequal size	G08BAF
	<b>Dawson's</b> integral	S15AFF
The maximum number of	<b>decimal</b> digits that can be represented	X02BEF
	<b>Decompose</b> a permutation into cycles	M01ZCF
...boundary value problem, finite difference technique with	<b>deferred</b> correction, continuation facility	D02RAF
ODEs, boundary value problem, finite difference technique with	<b>deferred</b> correction, general linear problem	D02GBF
ODEs, boundary value problem, finite difference technique with	<b>deferred</b> correction, simple nonlinear problem	D02GAF
$ULDL^T U^T$ factorization of real symmetric positive- <b>definite</b>	band matrix	F01BUF
Cholesky factorization of real symmetric positive- <b>definite</b>	band matrix	F07HDF
Cholesky factorization of complex Hermitian positive- <b>definite</b>	band matrix	F07HRF
Determinant of real symmetric positive- <b>definite</b>	band matrix (Black Box)	F03ACF
Estimate condition number of real symmetric positive- <b>definite</b>	band matrix, matrix already factorized by F07HDF	F07HGF
Estimate condition number of complex Hermitian positive- <b>definite</b>	band matrix, matrix already factorized by F07HRF	F07HUF
Refined solution with error bounds of real symmetric positive- <b>definite</b>	band system of linear equations, multiple right-hand sides	F07HHF
Refined solution with error bounds of complex Hermitian positive- <b>definite</b>	band system of linear equations, multiple right-hand sides	F07HVF
Solution of real symmetric positive- <b>definite</b>	band system of linear equations, multiple right-hand sides,...	F07HEF
Solution of complex Hermitian positive- <b>definite</b>	band system of linear equations, multiple right-hand sides,...	F07HSF
Reduction to standard form, generalized real symmetric- <b>definite</b>	banded eigenproblem	F01BVF
Solution of real symmetric positive- <b>definite</b>	banded simultaneous linear equations with multiple...	F04ACF
All eigenvalues of generalized banded real symmetric- <b>definite</b>	eigenproblem (Black Box)	F02PHF
Reduction to standard form of complex Hermitian- <b>definite</b>	generalized eigenproblem $Ax = \lambda Bx$ , $ABx = \lambda x$ or...	F08SSF
Reduction to standard form of real symmetric- <b>definite</b>	generalized eigenproblem $Ax = \lambda Bx$ , $ABx = \lambda x$ or...	F08SEF
Reduction to standard form of complex Hermitian- <b>definite</b>	generalized eigenproblem $Ax = \lambda Bx$ , $ABx = \lambda x$ or...	F08TSF
Reduction to standard form of real symmetric- <b>definite</b>	generalized eigenproblem $Ax = \lambda Bx$ , $ABx = \lambda x$ or...	F08TEF
All eigenvalues and eigenvectors of real symmetric- <b>definite</b>	generalized problem (Black Box)	F02FDF
All eigenvalues and eigenvectors of complex Hermitian- <b>definite</b>	generalized problem (Black Box)	F02HDF
Evaluation of fitted cubic spline, <b>definite</b>	integral	E02BDF
Interpolated values, interpolant computed by E01BEF, <b>definite</b>	integral, one variable	E01BHF
Inverse of real symmetric positive- <b>definite</b>	matrix	F01ADF
$LL^T$ factorization and determinant of real symmetric positive- <b>definite</b>	matrix	F03AEF
Cholesky factorization of real symmetric positive- <b>definite</b>	matrix	F07FDF
Cholesky factorization of complex Hermitian positive- <b>definite</b>	matrix	F07FRF
...tridiagonal matrix, reduced from real symmetric positive- <b>definite</b>	matrix	F08JGF
...tridiagonal matrix, reduced from complex Hermitian positive- <b>definite</b>	matrix	F08JUF
Determinant of real symmetric positive- <b>definite</b>	matrix (Black Box)	F03ABF
Estimate condition number of real symmetric positive- <b>definite</b>	matrix, matrix already factorized by F07FDF	F07FCF
Inverse of real symmetric positive- <b>definite</b>	matrix, matrix already factorized by F07FDF	F07JUF
Estimate condition number of complex Hermitian positive- <b>definite</b>	matrix, matrix already factorized by F07FRF	F07FUF
Inverse of complex Hermitian positive- <b>definite</b>	matrix, matrix already factorized by F07FRF	F07FWF
Estimate condition number of real symmetric positive- <b>definite</b>	matrix, matrix already factorized by F07GDF, packed storage	F07GGF
Inverse of real symmetric positive- <b>definite</b>	matrix, matrix already factorized by F07GDF, packed storage	F07GJF
Estimate condition number of complex Hermitian positive- <b>definite</b>	matrix, matrix already factorized by F07GRF, packed storage	F07GUF
Inverse of complex Hermitian positive- <b>definite</b>	matrix, matrix already factorized by F07GRF, packed storage	F07GWF
Cholesky factorization of real symmetric positive- <b>definite</b>	matrix, packed storage	F07GRF
Cholesky factorization of complex Hermitian positive- <b>definite</b>	matrix, packed storage	F01ABF
Inverse of real symmetric positive- <b>definite</b>	matrix using iterative refinement	F04AGF
Solution of real symmetric positive- <b>definite</b>	simultaneous linear equations (coefficient matrix already...	F04ASF
Solution of real symmetric positive- <b>definite</b>	simultaneous linear equations, one right-hand side...	F04AFF
Solution of real symmetric positive- <b>definite</b>	simultaneous linear equations using iterative refinement...	F04ABF
Solution of real symmetric positive- <b>definite</b>	simultaneous linear equations with multiple right-hand...	F07FHF
Refined solution with error bounds of real symmetric positive- <b>definite</b>	system of linear equations, multiple right-hand sides	F07FVF
Refined solution with error bounds of complex Hermitian positive- <b>definite</b>	system of linear equations, multiple right-hand sides,...	F07FEF
Solution of real symmetric positive- <b>definite</b>	system of linear equations, multiple right-hand sides,...	F07FSF
Solution of complex Hermitian positive- <b>definite</b>	system of linear equations, multiple right-hand sides,...	F07GEF
Solution of real symmetric positive- <b>definite</b>	system of linear equations, multiple right-hand sides,...	F07GSF
Solution of complex Hermitian positive- <b>definite</b>	system of linear equations, multiple right-hand sides,...	F07GHF
Refined solution with error bounds of real symmetric positive- <b>definite</b>	system of linear equations, multiple right-hand sides,...	F07GVF
...solution of the Yule–Walker equations for real symmetric positive- <b>definite</b>	Toeplitz matrix	F04MEF
Solution of the Yule–Walker equations for real symmetric positive- <b>definite</b>	Toeplitz matrix, one right-hand side	F04PEF
Update solution of real symmetric positive- <b>definite</b>	Toeplitz system	F04MFF
Solution of real symmetric positive- <b>definite</b>	Toeplitz system, one right-hand side	F04FFF
All eigenvalues and eigenvectors of real symmetric positive- <b>definite</b>	tridiagonal matrix, reduced from complex Hermitian...	F08JUF
All eigenvalues and eigenvectors of real symmetric positive- <b>definite</b>	tridiagonal matrix, reduced from real symmetric...	F08JGF
Solution of real symmetric positive- <b>definite</b>	tridiagonal simultaneous linear equations, one right-hand...	F04FAF
$LDL^T$ factorization of real symmetric positive- <b>definite</b>	variable-bandwidth matrix	F01MCF
Solution of real symmetric positive- <b>definite</b>	variable-bandwidth simultaneous linear equations ...	F04MCF
	<b>Degenerate</b> symmetrised elliptic integral of 1st kind $R_C(x, y)$	S21BAF
Zero of continuous function in given interval, Bus and <b>Dekker</b> algorithm		C05ADF
Zero of continuous function, Bus and <b>Dekker</b> algorithm, from given starting value, binary search for interval		C05AGF
Zero in given interval of continuous function by Bus and <b>Dekker</b> algorithm (reverse communication)		C05AZF
	Delete a variable from a general linear regression model	G02DFF
	Add/delete an observation to/from a general linear regression model	G02DCF
	Constructs <b>dendrogram</b> (for use after G03ECF)	G03EHF
	Kernel <b>density</b> estimate using Gaussian kernel	G10BAF
Computes upper and lower tail probabilities and probability	<b>density</b> function for the beta distribution	G01EEF
Minimum, function of one variable, using first <b>derivative</b>		E04BBF
...values, interpolant computed by E01BEF, function and first <b>derivative</b>	of fitted polynomial in Chebyshev series form	E02AHF
Interpolating functions, polynomial interpolant, data may include <b>derivative</b>	values, one variable	E01BGF
		E01AEF
Check user's routine for calculating first <b>derivatives</b>		C05ZAF
Evaluation of fitted cubic spline, function and <b>derivatives</b>		E02BCF
Check user's routine for calculating Jacobian of first <b>derivatives</b>		E04YAF
...correlation matrix, user-supplied weight function plus <b>derivatives</b>		G02HLF
Solution of system of nonlinear equations using first <b>derivatives</b>	(comprehensive)	C05PCF
...algorithm, function of several variables using first <b>derivatives</b>	(comprehensive)	E04DGF

...Gauss–Newton and quasi-Newton algorithm using first	<b>derivatives</b> (comprehensive)	E04GBF
...Gauss–Newton and modified Newton algorithm using first	<b>derivatives</b> (comprehensive)	E04GDF
...Gauss–Newton and modified Newton algorithm, using second	<b>derivatives</b> (comprehensive)	E04HEF
...Newton algorithm, simple bounds, using first	<b>derivatives</b> (comprehensive)	E04KDF
...algorithm, simple bounds, using first and second	<b>derivatives</b> (comprehensive)	E04LBF
...method, using function values and optionally first	<b>derivatives</b> (comprehensive)	E04UNF
Solution of system of nonlinear equations using first	<b>derivatives</b> (easy-to-use)	C05PBF
...Gauss–Newton and quasi-Newton algorithm, using first	<b>derivatives</b> (easy-to-use)	E04GYF
...Gauss–Newton and modified Newton algorithm using first	<b>derivatives</b> (easy-to-use)	E04GZF
...Gauss–Newton and modified Newton algorithm, using second	<b>derivatives</b> (easy-to-use)	E04HYF
...quasi-Newton algorithm, simple bounds, using first	<b>derivatives</b> (easy-to-use)	E04KYF
...Newton algorithm, simple bounds, using first	<b>derivatives</b> (easy-to-use)	E04KZF
...algorithm, simple bounds, using first and second	<b>derivatives</b> (easy-to-use)	E04LYF
...constraints, using function values and optionally first	<b>derivatives</b> (forward communication, comprehensive)	E04UCF
Least-squares polynomial fit, values and	<b>derivatives</b> may be constrained, arbitrary data points	E02AGF
Check user's routine for calculating first	<b>derivatives</b> of function	E04HCF
Check user's routine for calculating second	<b>derivatives</b> of function	E04HDF
Check user's routines for calculating first	<b>derivatives</b> of function and constraints	E04ZCF
Scaled	<b>derivatives</b> of $\psi(x)$	S14ADF
Solution of system of nonlinear equations using first	<b>derivatives</b> (reverse communication)	C05PDF
...constraints, using function values and optionally first	<b>derivatives</b> (reverse communication, comprehensive)	E04UFF
Numerical differentiation,	<b>derivatives</b> up to order 14, function of one real variable	D04AAF
Analysis of variance, general row and column	<b>design</b> , treatment means and standard errors	G04BCF
Analysis of variance, randomized block or completely randomized	<b>design</b> , treatment means and standard errors	G04BBF
Analysis of variance, complete factorial	<b>design</b> , treatment means and standard errors	G04CAF
	<b>Determinant</b> of complex matrix (Black Box)	F03ADF
<i>LU</i> factorization and	<b>determinant</b> of real matrix	F03AFF
	<b>Determinant</b> of real matrix (Black Box)	F03AAF
	<b>Determinant</b> of real symmetric positive-definite band matrix...	F03ACF
<i>LL<sup>T</sup></i> factorization and	<b>determinant</b> of real symmetric positive-definite matrix	F03AEF
	<b>Determinant</b> of real symmetric positive-definite matrix...	F03ABF
	Computes <b>deviates</b> for Student's <i>t</i> -distribution	G01FBF
	Computes <b>deviates</b> for the beta distribution	G01FEF
	Computes <b>deviates</b> for the $\chi^2$ distribution	G01FCF
	Computes <b>deviates</b> for the <i>F</i> -distribution	G01FDF
	Computes <b>deviates</b> for the gamma distribution	G01FFF
	Computes <b>deviates</b> for the standard Normal distribution	G01FAF
	Computes <b>deviates</b> for the Studentized range statistic	G01FMF
...median, median absolute deviation, robust standard	<b>deviation</b>	G07DAF
Robust estimation, median, median absolute	<b>deviation</b> , robust standard deviation	G07DAF
Computes quantities needed for range-mean or standard	<b>deviation-mean</b> plot	G13AUF
Univariate time series,	<b>diagnostic</b> checking of residuals, following G13AEF or G13AFF	G13ASF
Multivariate time series,	<b>diagnostic</b> checking of residuals, following G13DCF	G13DSF
Real sparse nonsymmetric linear systems,	<b>diagnostic</b> for F11BBF	F11BCF
Real sparse nonsymmetric linear systems,	<b>diagnostic</b> for F11BEF	F11BFF
Complex sparse non-Hermitian linear systems,	<b>diagnostic</b> for F11BSF	F11BTF
Real sparse symmetric linear systems,	<b>diagnostic</b> for F11GBF	F11GCF
Second-order ODEs, IVP,	<b>diagnostics</b> for D02LAF	D02LYF
ODEs, IVP, integration	<b>diagnostics</b> for D02PCF and D02PDF	D02PYF
ODEs, IVP, error assessment	<b>diagnostics</b> for D02PCF and D02PDF	D02PZF
ODEs, IVP,	<b>diagnostics</b> for D02QFF and D02QGF	D02QXF
ODEs, IVP, root-finding	<b>diagnostics</b> for D02QFF and D02QGF	D02QYF
ODEs, general nonlinear boundary value problem,	<b>diagnostics</b> for D02TKF	D02TZF
ODEs, IVP, sparse Jacobian, linear algebra	<b>diagnostics</b> , for use with D02M–N routines	D02NXF
ODEs, IVP, integrator	<b>diagnostics</b> , for use with D02M–N routines	D02NYF
<i>LU</i> factorization of real almost block	<b>diagonal</b> matrix	F01LHF
Multiply real vector by	<b>diagonal</b> matrix	F06FCF
Multiply complex vector by complex	<b>diagonal</b> matrix	F06HCF
Multiply complex vector by real	<b>diagonal</b> matrix	F06KCF
Solution of real almost block	<b>diagonal</b> simultaneous linear equations (coefficient matrix already...	F04LHF
Elliptic PDE, solution of finite	<b>difference</b> equations by a multigrid technique	D03EDF
Elliptic PDE, solution of finite	<b>difference</b> equations by SIP, five-point two-dimensional molecule,...	D03EBF
Elliptic PDE, solution of finite	<b>difference</b> equations by SIP, five-point two-dimensional molecule,...	D03UAF
Elliptic PDE, solution of finite	<b>difference</b> equations by SIP for seven-point three-dimensional...	D03ECF
Elliptic PDE, solution of finite	<b>difference</b> equations by SIP, seven-point three-dimensional...	D03UBF
Computes <i>t</i> -test statistic for a	<b>difference</b> in means between two Normal populations,...	G07CAF
Sum or	<b>difference</b> of two complex matrices, optional scaling and transposition	F01CWF
Sum or	<b>difference</b> of two real matrices, optional scaling and transposition	F01CTF
ODEs, general nonlinear boundary value problem, finite	<b>difference</b> technique with deferred correction, continuation facility	D02RAF
ODEs, boundary value problem, finite	<b>difference</b> technique with deferred correction, general linear problem	D02GBF
ODEs, boundary value problem, finite	<b>difference</b> technique with deferred correction, simple nonlinear...	D02GAF
Multivariate time series,	<b>differences</b> and/or transforms (for use before G13DCF)	G13DLF
Computes confidence intervals for	<b>differences</b> between means computed by G04BBF or G04BCF	G04DBF
General system of parabolic PDEs, method of lines, finite	<b>differences</b> , one space variable	D03PCF
...parabolic PDEs, coupled DAEs, method of lines, finite	<b>differences</b> , one space variable	D03PHF
...parabolic PDEs, coupled DAEs, method of lines, finite	<b>differences</b> , remeshing, one space variable	D03PF
General system of second-order PDEs, method of lines, finite	<b>differences</b> , remeshing, two space variables, rectangular region	D03RAF
General system of second-order PDEs, method of lines, finite	<b>differences</b> , remeshing, two space variables, rectilinear region	D03RBF
Univariate time series, seasonal and non-seasonal	<b>differencing</b>	G13AAF
Numerical	<b>differentiation</b> , derivatives up to order 14, function of one real...	D04AAF
Estimate (using numerical	<b>differentiation</b> ) gradient and/or Hessian of a function	E04XAF
General system of convection- <b>diffusion</b> PDEs with source terms in conservative form,...		D03PLF
General system of convection- <b>diffusion</b> PDEs with source terms in conservative form,...		D03PSF
General system of convection- <b>diffusion</b> PDEs with source terms in conservative form,...		D03PFF
Shortest path problem, Dijkstra's algorithm		H03ADF
Discrete cosine transform		C06HBF
Discrete cosine transform (easy-to-use)		C06RBF
Two-dimensional complex	<b>discrete</b> Fourier transform	C06FUF
Three-dimensional complex	<b>discrete</b> Fourier transform	C06XFF
Single one-dimensional complex	<b>discrete</b> Fourier transform, complex data format	C06PCF
Two-dimensional complex	<b>discrete</b> Fourier transform, complex data format	C06PUF
Three-dimensional complex	<b>discrete</b> Fourier transform, complex data format	C06PXF
Single one-dimensional real	<b>discrete</b> Fourier transform, extra workspace for greater speed	C06FAF
Single one-dimensional Hermitian	<b>discrete</b> Fourier transform, extra workspace for greater speed	C06FBF
Single one-dimensional complex	<b>discrete</b> Fourier transform, extra workspace for greater speed	C06FCF
Single one-dimensional real	<b>discrete</b> Fourier transform, no extra workspace	C06EAF
Single one-dimensional Hermitian	<b>discrete</b> Fourier transform, no extra workspace	C06EBF
Single one-dimensional complex	<b>discrete</b> Fourier transform, no extra workspace	C06ECF
One-dimensional complex	<b>discrete</b> Fourier transform of multi-dimensional data	C06FFF
Multi-dimensional data	<b>discrete</b> Fourier transform of multi-dimensional data...	C06FJF
One-dimensional complex	<b>discrete</b> Fourier transform of multi-dimensional data...	C06PFF

Multi-dimensional complex	<b>discrete</b>	Fourier transform of multi-dimensional data...	C06PJF
Single one-dimensional real and Hermitian complex	<b>discrete</b>	Fourier transform, using complex data format for...	C06PAF
Multiple one-dimensional real	<b>discrete</b>	Fourier transforms	C06FPF
Multiple one-dimensional Hermitian	<b>discrete</b>	Fourier transforms	C06FQF
Multiple one-dimensional complex	<b>discrete</b>	Fourier transforms	C06FRF
Multiple one-dimensional complex	<b>discrete</b>	Fourier transforms using complex data format	C06PRF
Multiple one-dimensional complex	<b>discrete</b>	Fourier transforms using complex data format and...	C06PSF
Multiple one-dimensional real and Hermitian complex	<b>discrete</b>	Fourier transforms, using complex data format...	C06PPF
Multiple one-dimensional real and Hermitian complex	<b>discrete</b>	Fourier transforms, using complex data format...	C06PQF
	<b>Discrete</b>	quarter-wave cosine transform	C06HDF
	<b>Discrete</b>	quarter-wave cosine transform (easy-to-use)	C06RDF
	<b>Discrete</b>	quarter-wave sine transform	C06HCF
	<b>Discrete</b>	quarter-wave sine transform (easy-to-use)	C06RCF
	<b>Discrete</b>	sine transform	C06HAF
	<b>Discrete</b>	sine transform (easy-to-use)	C06RAF
	<b>Discretize</b>	a second-order elliptic PDE on a rectangle	D03EEF
...within-group covariance matrices and matrices for	<b>discriminant</b>	analysis	G03DAF
	<b>Dispersion</b>	tests	G08
Computes	<b>distance</b>	matrix	G03EAF
Computes Mahalanobis squared	<b>distances</b>	for group or pooled variance-covariance matrices...	G03DBF
Computes probabilities for the standard Normal	<b>distribution</b>		G01EAF
Computes probabilities for Student's $t$	<b>distribution</b>		G01EBF
Computes probabilities for $\chi^2$	<b>distribution</b>		G01ECF
Computes probabilities for $F$	<b>distribution</b>		G01EDF
...and probability density function for the beta	<b>distribution</b>		G01EEF
Computes probabilities for the gamma	<b>distribution</b>		G01EFF
Computes probability for von Mises	<b>distribution</b>		G01ERF
Computes probabilities for the one-sample Kolmogorov-Smirnov	<b>distribution</b>		G01EYF
Computes probabilities for the two-sample Kolmogorov-Smirnov	<b>distribution</b>		G01EZF
Computes deviates for the standard Normal	<b>distribution</b>		G01FAF
Computes deviates for Student's $t$	<b>distribution</b>		G01FBF
Computes deviates for the $\chi^2$	<b>distribution</b>		G01FCF
Computes deviates for the $F$	<b>distribution</b>		G01FDF
Computes deviates for the beta	<b>distribution</b>		G01FEF
Computes deviates for the gamma	<b>distribution</b>		G01FFF
Computes probabilities for the non-central Student's $t$	<b>distribution</b>		G01GBF
Computes probabilities for the non-central $\chi^2$	<b>distribution</b>		G01GCF
Computes probabilities for the non-central $F$	<b>distribution</b>		G01GDF
Computes probabilities for the non-central beta	<b>distribution</b>		G01GEF
Computes probability for the bivariate Normal	<b>distribution</b>		G01HAF
Computes probabilities for the multivariate Normal	<b>distribution</b>		G01HBF
Pseudo-random real numbers, (negative) exponential	<b>distribution</b>		G05DBF
Pseudo-random real numbers, logistic	<b>distribution</b>		G05DCF
Pseudo-random real numbers, Normal	<b>distribution</b>		G05DDF
Pseudo-random real numbers, log-normal	<b>distribution</b>		G05DEF
Pseudo-random real numbers, Cauchy	<b>distribution</b>		G05DFF
Pseudo-random real numbers, $\chi^2$	<b>distribution</b>		G05DHF
Pseudo-random real numbers, Student's $t$	<b>distribution</b>		G05DJF
Pseudo-random real numbers, $F$	<b>distribution</b>		G05DKF
Pseudo-random real numbers, Weibull	<b>distribution</b>		G05DPF
Pseudo-random integer, Poisson	<b>distribution</b>		G05DRF
Pseudo-random integer from uniform	<b>distribution</b>		G05DYF
Set up reference vector for multivariate Normal	<b>distribution</b>		G05EAF
...for generating pseudo-random integers, uniform	<b>distribution</b>		G05EBF
...for generating pseudo-random integers, Poisson	<b>distribution</b>		G05ECF
...for generating pseudo-random integers, binomial	<b>distribution</b>		G05EDF
...generating pseudo-random integers, negative binomial	<b>distribution</b>		G05EEF
...generating pseudo-random integers, hypergeometric	<b>distribution</b>		G05EFF
Generates a vector of random numbers from a uniform	<b>distribution</b>		G05FAF
...random numbers from an (negative) exponential	<b>distribution</b>		G05FBF
Generates a vector of random numbers from a Normal	<b>distribution</b>		G05FDF
Generates a vector of pseudo-random numbers from a beta	<b>distribution</b>		G05FEF
Generates a vector of pseudo-random numbers from a gamma	<b>distribution</b>		G05FFF
Generates a vector of pseudo-random variates from von Mises	<b>distribution</b>		G05FSF
Computes confidence interval for the parameter of a binomial	<b>distribution</b>		G07AAF
Computes confidence interval for the parameter of a Poisson	<b>distribution</b>		G07ABF
...likelihood estimates for parameters of the Weibull	<b>distribution</b>		G07BEF
...Kolmogorov-Smirnov test for a user-supplied	<b>distribution</b>		G08CCF
...likelihood estimates for parameters of the Normal	<b>distribution</b>	from grouped and/or censored data	G07BBF
	Binomial	<b>distribution</b> function	G01BJF
	Poisson	<b>distribution</b> function	G01BKF
	Hypergeometric	<b>distribution</b> function	G01BLF
...cumulative distribution function or probability	<b>distribution</b> function		G05EXF
Set up reference vector from supplied cumulative	<b>distribution</b> function or probability distribution function		G05EXF
	Cumulative normal	<b>distribution</b> function $P(x)$	S15ABF
	Complement of cumulative normal	<b>distribution</b> function $Q(x)$	S15ACF
	Pseudo-random real numbers, uniform	<b>distribution</b> over (0,1)	G05CAF
	Pseudo-random real numbers, uniform	<b>distribution</b> over $(a, b)$	G05DAF
	Gaussian	<b>distribution</b> See Normal distribution	
Performs the one-sample Kolmogorov-Smirnov test for standard	<b>distributions</b>		G08CBF
Performs the $\chi^2$ goodness of fit test, for standard continuous	<b>distributions</b>		G08CGF
Jacobian elliptic functions sn, cn and dn			S21CAF
...finite interval, strategy due to Piessens and de	<b>Doncker</b>	, allowing for badly-behaved integrands	D01AJF
	<b>Dot</b>	product of two complex sparse vector, conjugated	F06GSF
	<b>Dot</b>	product of two complex sparse vector, unconjugated	F06GRF
	<b>Dot</b>	product of two complex vectors, conjugated	F06GBF
	<b>Dot</b>	product of two complex vectors, unconjugated	F06GAF
	<b>Dot</b>	product of two real sparse vectors	F06ERF
	<b>Dot</b>	product of two real vectors	F06EAF
Performs the runs up or runs	<b>down</b>	test for randomness	G08EAF
Computes bounds for the significance of a	<b>Durbin-Watson</b>	statistic	G01EFP
Computes	<b>Durbin-Watson</b>	test statistic	G02FCF
...system, finite/infinite range, eigenvalue and	<b>eigenfunction</b>	, user-specified break-points	D02KEF
...form, generalized real symmetric-definite banded	<b>eigenproblem</b>		F01BVF
...form of complex Hermitian-definite generalized	<b>eigenproblem</b>	$Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x, \dots$	F08SSF
Reduction to standard form of real symmetric-definite generalized	<b>eigenproblem</b>	$Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x, \dots$	F08SEF
Reduction of real symmetric-definite banded generalized	<b>eigenproblem</b>	$Ax = \lambda Bx$ to standard form $Cy = \lambda y, \dots$	F08USEF
Reduction of complex Hermitian-definite banded generalized	<b>eigenproblem</b>	$Ax = \lambda Bx$ to standard form $Cy = \lambda y, \dots$	F08USF
...form of complex Hermitian-definite generalized	<b>eigenproblem</b>	$Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x, \dots$	F08TSF
Reduction to standard form of real symmetric-definite generalized	<b>eigenproblem</b>	$Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x, \dots$	F08TEF
All eigenvalues of generalized banded real symmetric-definite	<b>eigenproblem</b>	(Black Box)	F02FHF

Selected eigenvalues and eigenvectors of sparse symmetric	<b>eigenproblem</b> (Black Box)	F02FJF
Eigenvector of generalized real banded	<b>eigenproblem</b> by inverse iteration	F02SDF
All eigenvalues and optionally eigenvectors of generalized complex	<b>eigenproblem</b> by <i>QZ</i> algorithm (Black Box)	F02GJF
All eigenvalues and optionally eigenvectors of generalized	<b>eigenproblem</b> by <i>QZ</i> algorithm, real matrices (Black Box)	F02BJF
...regular/singular system, finite/infinite range,	<b>eigenvalue</b> and eigenfunction, user-specified break-points	D02KEF
...Sturm-Liouville problem, regular system, finite range,	Compute <b>eigenvalue</b> of 2 by 2 real symmetric matrix	F06BPF
...regular/singular system, finite/infinite range,	<b>eigenvalue</b> only	D02KAF
	<b>eigenvalue</b> only, user-specified break-points	D02KDF
	All <b>eigenvalues</b> and eigenvectors of complex general matrix...	F02GBF
	All <b>eigenvalues</b> and eigenvectors of complex Hermitian matrix...	F02HAF
	Selected <b>eigenvalues</b> and eigenvectors of complex Hermitian matrix...	F02HCF
	All <b>eigenvalues</b> and eigenvectors of complex Hermitian-definite...	F02HDF
	Selected <b>eigenvalues</b> and eigenvectors of complex nonsymmetric matrix...	F02GCF
Estimates of sensitivities of selected	<b>eigenvalues</b> and eigenvectors of complex upper triangular matrix	F08QYF
	All <b>eigenvalues</b> and eigenvectors of real general matrix (Black Box)	F02EBF
	Selected <b>eigenvalues</b> and eigenvectors of real nonsymmetric matrix (Black Box)	F02ECF
	All <b>eigenvalues</b> and eigenvectors of real symmetric matrix (Black Box)	F02FAF
	Selected <b>eigenvalues</b> and eigenvectors of real symmetric matrix (Black Box)	F02FCF
	All <b>eigenvalues</b> and eigenvectors of real symmetric positive-definite...	F08JUF
	All <b>eigenvalues</b> and eigenvectors of real symmetric positive-definite...	F08JGF
	All <b>eigenvalues</b> and eigenvectors of real symmetric tridiagonal matrix,...	F08JSF
	All <b>eigenvalues</b> and eigenvectors of real symmetric tridiagonal matrix,...	F08JEF
	All <b>eigenvalues</b> and eigenvectors of real symmetric-definite generalized...	F02DFD
Estimates of sensitivities of selected	<b>eigenvalues</b> and eigenvectors of real upper quasi-triangular matrix	F08QLF
	Selected <b>eigenvalues</b> and eigenvectors of sparse symmetric eigenproblem...	F02FJF
	All <b>eigenvalues</b> and optionally all eigenvectors of complex Hermitian...	F08HQF
	All <b>eigenvalues</b> and optionally all eigenvectors of complex Hermitian...	F08GQF
	All <b>eigenvalues</b> and optionally all eigenvectors of complex Hermitian...	F08QFQ
	All <b>eigenvalues</b> and optionally all eigenvectors of real symmetric...	F08HCF
	All <b>eigenvalues</b> and optionally all eigenvectors of real symmetric...	F08GCF
	All <b>eigenvalues</b> and optionally all eigenvectors of real symmetric...	F08FCF
	All <b>eigenvalues</b> and optionally all eigenvectors of real symmetric...	F08JCF
	All <b>eigenvalues</b> and optionally all eigenvectors of real symmetric...	F02GJF
	All <b>eigenvalues</b> and optionally eigenvectors of generalized complex...	F02BJF
	All <b>eigenvalues</b> and Schur factorization of complex general...	F02GAF
	<b>Eigenvalues</b> and Schur factorization of complex upper Hessenberg...	F08PSF
	All <b>eigenvalues</b> and Schur factorization of real general matrix...	F02EAF
	<b>Eigenvalues</b> and Schur factorization of real upper Hessenberg...	F08PEF
	All <b>eigenvalues</b> of generalized banded real symmetric-definite...	F02FHF
	Selected <b>eigenvalues</b> of real symmetric tridiagonal matrix by bisection	F08JFF
	All <b>eigenvalues</b> of real symmetric tridiagonal matrix, root-free...	F08JFF
...basis of right invariant subspace for selected	<b>eigenvalues</b> , with estimates of sensitivities	F08QGF
...basis of right invariant subspace for selected	<b>eigenvalues</b> , with estimates of sensitivities	F08QUF
	<b>Eigenvector</b> of generalized real banded eigenproblem by inverse...	F02SDF
...tridiagonal matrix by inverse iteration, storing	<b>eigenvectors</b> in complex array	F08JXF
...tridiagonal matrix by inverse iteration, storing	<b>eigenvectors</b> in real array	F08JKF
	Transform <b>eigenvectors</b> of complex balanced matrix to those of original...	F08NWF
All eigenvalues and	<b>eigenvectors</b> of complex general matrix (Black Box)	F02GBF
All eigenvalues and optionally all	<b>eigenvectors</b> of complex Hermitian band matrix,...	F08HQF
Selected eigenvalues and	<b>eigenvectors</b> of complex Hermitian matrix (Black Box)	F02HAF
All eigenvalues and optionally all	<b>eigenvectors</b> of complex Hermitian matrix, packed storage,...	F08GQF
All eigenvalues and optionally all	<b>eigenvectors</b> of complex Hermitian matrix, using divide and conquer	F08FQF
Selected eigenvalues and	<b>eigenvectors</b> of complex Hermitian-definite generalized problem...	F02HDF
Selected right and/or left	<b>eigenvectors</b> of complex nonsymmetric matrix (Black Box)	F02GCF
Left and right	<b>eigenvectors</b> of complex upper Hessenberg matrix by inverse iteration	F08PXF
Estimates of sensitivities of selected eigenvalues and	<b>eigenvectors</b> of complex upper triangular matrix	F08QXF
All eigenvalues and optionally	<b>eigenvectors</b> of complex upper triangular matrix	F08QYF
All eigenvalues and optionally	<b>eigenvectors</b> of generalized complex eigenproblem by <i>QZ</i> ...	F02GJF
Transform	<b>eigenvectors</b> of generalized eigenproblem by <i>QZ</i> algorithm,...	F02BJF
Selected eigenvalues and	<b>eigenvectors</b> of real balanced matrix to those of original...	F08NWF
All eigenvalues and optionally all	<b>eigenvectors</b> of real general matrix (Black Box)	F02EBF
Selected eigenvalues and	<b>eigenvectors</b> of real nonsymmetric matrix (Black Box)	F02ECF
All eigenvalues and optionally all	<b>eigenvectors</b> of real symmetric band matrix,...	F08HCF
Selected eigenvalues and	<b>eigenvectors</b> of real symmetric matrix (Black Box)	F02FAF
All eigenvalues and optionally all	<b>eigenvectors</b> of real symmetric matrix (Black Box)	F02FCF
All eigenvalues and optionally all	<b>eigenvectors</b> of real symmetric matrix, packed storage,...	F08GCF
All eigenvalues and	<b>eigenvectors</b> of real symmetric matrix,...	F08FCF
Selected	<b>eigenvectors</b> of real symmetric positive-definite tridiagonal...	F08JUF
Selected	<b>eigenvectors</b> of real symmetric positive-definite tridiagonal...	F08JGF
All eigenvalues and	<b>eigenvectors</b> of real symmetric tridiagonal matrix by inverse...	F08JXF
Selected	<b>eigenvectors</b> of real symmetric tridiagonal matrix, reduced...	F08JKF
All eigenvalues and	<b>eigenvectors</b> of real symmetric tridiagonal matrix, reduced...	F08JSF
All eigenvalues and optionally all	<b>eigenvectors</b> of real symmetric tridiagonal matrix, reduced...	F08JEF
Selected right and/or left	<b>eigenvectors</b> of real symmetric tridiagonal matrix,...	F08JCF
Left and right	<b>eigenvectors</b> of real symmetric-definite generalized problem...	F02DFD
Estimates of sensitivities of selected eigenvalues and	<b>eigenvectors</b> of real upper Hessenberg matrix by inverse...	F08PKF
Selected eigenvalues and	<b>eigenvectors</b> of real upper quasi-triangular matrix	F08QKF
Selected eigenvalues and	<b>eigenvectors</b> of real upper quasi-triangular matrix	F08QLF
	<b>eigenvectors</b> of sparse symmetric eigenproblem (Black Box)	F02FJF
Generate complex	<b>elementary</b> reflection	F06HRF
Apply complex	<b>elementary</b> reflection	F06HTF
Generate real	<b>elementary</b> reflection, LINPACK style	F06FSF
Apply real	<b>elementary</b> reflection, LINPACK style	F06FUF
Generate real	<b>elementary</b> reflection, NAG style	F06FRF
Apply real	<b>elementary</b> reflection, NAG style	F06FTF
Gaussian	<b>elimination</b> See <i>LU</i> factorization	
Jacobian	<b>elliptic</b> functions sn, cn and dn	S21CAF
Degenerate symmetrised	<b>elliptic</b> integral of 1st kind $R_C(x, y)$	S21BAF
Symmetrised	<b>elliptic</b> integral of 1st kind $R_F(x, y, z)$	S21BBF
Symmetrised	<b>elliptic</b> integral of 2nd kind $R_D(x, y, z)$	S21BCF
Symmetrised	<b>elliptic</b> integral of 3rd kind $R_J(x, y, z, r)$	S21BDF
	<b>Elliptic</b> PDE, Helmholtz equation, three-dimensional...	D03FAF
	<b>Elliptic</b> PDE, Laplace's equation, two-dimensional arbitrary domain	D03EAF
Discretize a second-order	<b>elliptic</b> PDE on a rectangle	D03EEF
	<b>Elliptic</b> PDE, solution of finite difference equations by a...	D03EDF
	<b>Elliptic</b> PDE, solution of finite difference equations by SIP,...	D03EBF
	<b>Elliptic</b> PDE, solution of finite difference equations by SIP,...	D03UAF
	<b>Elliptic</b> PDE, solution of finite difference equations by SIP,...	D03ECF
	<b>Elliptic</b> PDE, solution of finite difference equations by SIP,...	D03UBF
ODEs, IVP, resets	<b>end</b> of range for D02PDF	D02PWF
...adaptive, finite interval, weight function with	<b>end-point</b> singularities of algebraic-logarithmic type	D01APF
...convergence of sequence, Shanks' transformation and	<b>epsilon</b> algorithm	C06BAF
...general linear regression model and its standard	<b>error</b>	G02DNF
...of a generalized linear model and its standard	<b>error</b>	G02GNF
...bounds, impulse response function and its standard	<b>error</b>	G13CGF

ODEs, IVP,	<b>error</b> assessment diagnostics for D02PCF and D02PDF	D02PZF
	<b>Error</b> bounds for solution of complex band triangular system...	F07VVF
	<b>Error</b> bounds for solution of complex triangular system...	F07TVF
	<b>Error</b> bounds for solution of complex triangular system...	F07UVF
	<b>Error</b> bounds for solution of real band triangular system...	F07VHF
	<b>Error</b> bounds for solution of real triangular system...	F07THF
	<b>Error</b> bounds for solution of real triangular system...	F07UHF
Refined solution with	<b>error</b> bounds of complex band system of linear equations,...	F07BVF
Refined solution with	<b>error</b> bounds of complex Hermitian indefinite system...	F07MVF
Refined solution with	<b>error</b> bounds of complex Hermitian indefinite system...	F07PVF
Refined solution with	<b>error</b> bounds of complex Hermitian positive-definite band system...	F07HVF
Refined solution with	<b>error</b> bounds of complex Hermitian positive-definite system...	F07FVF
Refined solution with	<b>error</b> bounds of complex Hermitian positive-definite system...	F07GVF
Refined solution with	<b>error</b> bounds of complex symmetric system of linear equations,...	F07NVF
Refined solution with	<b>error</b> bounds of complex symmetric system of linear equations,...	F07QVF
Refined solution with	<b>error</b> bounds of complex system of linear equations,...	F07AVF
Refined solution with	<b>error</b> bounds of real band system of linear equations,...	F07BHF
Refined solution with	<b>error</b> bounds of real symmetric indefinite system of linear equations,...	F07MHF
Refined solution with	<b>error</b> bounds of real symmetric indefinite system of linear equations,...	F07PHF
Refined solution with	<b>error</b> bounds of real symmetric positive-definite band system...	F07HHF
Refined solution with	<b>error</b> bounds of real symmetric positive-definite system...	F07FHF
Refined solution with	<b>error</b> bounds of real symmetric positive-definite system...	F07GHF
Refined solution with	<b>error</b> bounds of real system of linear equations,...	F07AHF
ODEs, IVP, weighted norm of local	<b>error</b> estimate for D02M–N routines	D02ZAF
Scaled complex complement of	<b>error</b> function, $\exp(-z^2)\operatorname{erfc}(-iz)$	S15DDF
Complement of	<b>error</b> function $\operatorname{erfc}(x)$	S15ADF
	<b>Error</b> function $\operatorname{erf}(x)$	S15AEF
Return value of	<b>error</b> indicator/terminate with error message	P01ABF
Return value of error indicator/terminate with	<b>error</b> message	P01ABF
Return or set unit number for	<b>error</b> messages	X04AAF
Fits a generalized linear model with Normal	<b>errors</b>	G02GAF
Fits a generalized linear model with binomial	<b>errors</b>	G02GBF
Fits a generalized linear model with Poisson	<b>errors</b>	G02GCF
Fits a generalized linear model with gamma	<b>errors</b>	G02GDF
...randomized design, treatment means and standard	<b>errors</b>	G04BBF
...and column design, treatment means and standard	<b>errors</b>	G04BCF
...factorial design, treatment means and standard	<b>errors</b>	G04CAF
Multivariate time series, forecasts and their standard	<b>errors</b>	G13DJF
Multivariate time series, updates forecasts and their standard	<b>errors</b>	G13DKF
Estimates and standard	<b>errors</b> of parameters of a general linear model...	G02GKF
Estimates and standard	<b>errors</b> of parameters of a general linear regression model...	G02DKF
Computes	<b>estimable</b> function of a general linear regression model...	G02DNF
Computes	<b>estimable</b> function of a generalized linear model...	G02GNF
	<b>Estimate</b> condition number of complex band matrix,...	F07BUF
	<b>Estimate</b> condition number of complex band triangular matrix	F07VUF
	<b>Estimate</b> condition number of complex Hermitian indefinite matrix,...	F07MUF
	<b>Estimate</b> condition number of complex Hermitian indefinite matrix,...	F07PUF
	<b>Estimate</b> condition number of complex Hermitian positive-definite...	F07HUF
	<b>Estimate</b> condition number of complex Hermitian positive-definite...	F07FUF
	<b>Estimate</b> condition number of complex Hermitian positive-definite...	F07GUF
	<b>Estimate</b> condition number of complex matrix,...	F07AUF
	<b>Estimate</b> condition number of complex symmetric matrix,...	F07NUF
	<b>Estimate</b> condition number of complex symmetric matrix,...	F07QUF
	<b>Estimate</b> condition number of complex triangular matrix	F07TUF
	<b>Estimate</b> condition number of complex triangular matrix,...	F07UUF
	<b>Estimate</b> condition number of real band matrix,...	F07BGF
	<b>Estimate</b> condition number of real band triangular matrix	F07VGF
	<b>Estimate</b> condition number of real matrix,...	F07AGF
	<b>Estimate</b> condition number of real symmetric indefinite matrix,...	F07MGF
	<b>Estimate</b> condition number of real symmetric indefinite matrix,...	F07PGF
	<b>Estimate</b> condition number of real symmetric positive-definite...	F07HGF
	<b>Estimate</b> condition number of real symmetric positive-definite...	F07FCF
	<b>Estimate</b> condition number of real symmetric positive-definite...	F07GGF
	<b>Estimate</b> condition number of real triangular matrix	F07TGF
	<b>Estimate</b> condition number of real triangular matrix, packed storage	F07UGF
ODEs, IVP, weighted norm of local error	<b>estimate</b> for D02M–N routines	D02ZAF
Kernel density	<b>estimate</b> using Gaussian kernel	G10BAF
	<b>Estimate</b> (using numerical differentiation) gradient and/or...	E04XAF
Robust regression, standard $M$ -	<b>estimates</b>	G02HAF
	<b>Estimates</b> and standard errors of parameters of a general linear...	G02GKF
	<b>Estimates</b> and standard errors of parameters of a general linear...	G02DKF
Robust estimation, $M$ -	<b>estimates</b> for location and scale parameters, standard weight functions	G07DBF
Robust estimation, $M$ -	<b>estimates</b> for location and scale parameters, user-defined weight...	G07DCF
Computes maximum likelihood	<b>estimates</b> for parameters of the Normal distribution from grouped...	G07BBF
Computes maximum likelihood	<b>estimates</b> for parameters of the Weibull distribution	G07BEF
	<b>Estimates</b> of linear parameters and general linear regression model...	G02DDF
...invariant subspace for selected eigenvalues, with	<b>estimates</b> of sensitivities	F08QGF
...invariant subspace for selected eigenvalues, with	<b>estimates</b> of sensitivities	F08QUF
	<b>Estimates</b> of sensitivities of selected eigenvalues and eigenvectors...	F08QYF
	<b>Estimates</b> of sensitivities of selected eigenvalues and eigenvectors...	F08QLF
Computes Kaplan–Meier (product-limit)	<b>estimates</b> of survival probabilities	G12AAF
Computes maximum likelihood	<b>estimates</b> of the parameters of a factor analysis model,...	G03CAF
Computes a trimmed and winsorized mean of a single sample with	<b>estimates</b> of their variance	G07DDF
	Huber <b>estimates</b> See Robust	
Norm estimation (for use in condition	<b>estimation</b> ), complex matrix	F04ZCF
Norm	<b>estimation</b> (for use in condition estimation), complex matrix	F04ZCF
Norm	<b>estimation</b> (for use in condition estimation), real matrix	F04YCF
Robust	<b>estimation</b> , median, median absolute deviation,...	G07DAF
Robust	<b>estimation</b> , $M$ -estimates for location and scale parameters,...	G07DBF
Robust	<b>estimation</b> , $M$ -estimates for location and scale parameters,...	G07DCF
Calculates a robust	<b>estimation</b> of a correlation matrix, Huber's weight function	G02HKF
Calculates a robust	<b>estimation</b> of a correlation matrix, user-supplied weight function	G02HMF
Calculates a robust	<b>estimation</b> of a correlation matrix, user-supplied weight function...	G02HLP
Multivariate time series,	<b>estimation</b> of multi-input model	G13BEF
Multivariate time series, preliminary	<b>estimation</b> of transfer function model	G13BDF
Multivariate time series,	<b>estimation</b> of VARMA model	G13DDF
Norm estimation (for use in condition	<b>estimation</b> ), real matrix	F04YCF
Univariate time series, preliminary	<b>estimation</b> , seasonal ARIMA model	G13ADF
Univariate time series,	<b>estimation</b> , seasonal ARIMA model (comprehensive)	G13AEF
Univariate time series,	<b>estimation</b> , seasonal ARIMA model (easy-to-use)	G13AFF
Compute	<b>Euclidean</b> norm from scaled form	F06BMF
Compute	<b>Euclidean</b> norm of complex vector	F06JF
Update	<b>Euclidean</b> norm of complex vector in scaled form	F06KJF
Compute	<b>Euclidean</b> norm of real vector	F06EJF
Compute weighted	<b>Euclidean</b> norm of real vector	F06FKF
Update	<b>Euclidean</b> norm of real vector in scaled form	F06FJF
Roe's approximate Riemann solver for	<b>Euler</b> equations in conservative form,...	D03PUF
Osher's approximate Riemann solver for	<b>Euler</b> equations in conservative form,...	D03PVF
Modified HLL Riemann solver for	<b>Euler</b> equations in conservative form,...	D03PWF

Exact Riemann Solver for Euler equations in conservative form,...		D03PXF
Provides the mathematical constant $\gamma$ (Euler's Constant)		X01ABF
Interpolated values,	<b>evaluate</b> interpolant computed by E01SAF, two variables	E01SBF
Interpolated values,	<b>evaluate</b> interpolant computed by E01SEF, two variables	E01SEF
	<b>Evaluate</b> inverse Laplace transform as computed by C06LBF	C06LCF
Interpolated values,	<b>evaluate</b> rational interpolant computed by E01RAF, one variable	E01RBF
	<b>Evaluation</b> of fitted bicubic spline at a mesh of points	E02DFE
	<b>Evaluation</b> of fitted bicubic spline at a vector of points	E02DEF
	<b>Evaluation</b> of fitted cubic spline, definite integral	E02BDF
	<b>Evaluation</b> of fitted cubic spline, function and derivatives	E02BCF
	<b>Evaluation</b> of fitted cubic spline, function only	E02BBF
	<b>Evaluation</b> of fitted polynomial in one variable from...	E02AKF
	<b>Evaluation</b> of fitted polynomial in one variable from...	E02AEF
	<b>Evaluation</b> of fitted polynomial in two variables	E02CBF
	<b>Evaluation</b> of fitted rational function as computed by E02RAF	E02RBF
Interpolated values,	<b>Everett's</b> formula, equally spaced data, one variable	E01ABF
Computes the	<b>exact</b> probabilities for the Mann-Whitney $U$ statistic, no ties...	G08AJF
Computes the	<b>exact</b> probabilities for the Mann-Whitney $U$ statistic, ties...	G08AKF
Two-way contingency table analysis, with $\chi^2$ /Fisher's	<b>exact</b> test	G01AFF
	<b>Explicit</b> ODEs, stiff IVP, banded Jacobian (comprehensive)	D02NCF
	<b>Explicit</b> ODEs, stiff IVP, full Jacobian (comprehensive)	D02NBF
	<b>Explicit</b> ODEs, stiff IVP (reverse communication, comprehensive)	D02NMF
	<b>Explicit</b> ODEs, stiff IVP, sparse Jacobian (comprehensive)	D02NDF
Pseudo-random real numbers, (negative)	<b>exponential</b> distribution	G05DBF
Generates a vector of random numbers from an (negative)	<b>exponential</b> distribution	G05FBF
Complex	<b>exponential</b> , $e^z$	S01EAF
	<b>Exponential</b> integral $E_1(x)$	S13AAF
Ranks, Normal scores, approximate Normal scores or	<b>exponential</b> (Savage) scores	G01DHF
	<b>Extract</b> grid data from D03RBF	D03RZF
Computes a five-point summary (median, hinges and	<b>extremes</b> )	G01ALF
Computes probabilities for	<b>F-distribution</b>	G01EDF
Computes deviates for the	<b>F-distribution</b>	G01FDF
Computes probabilities for the non-central	<b>F-distribution</b>	G01GDF
Pseudo-random real numbers,	<b>F-distribution</b>	G05DKF
Computes maximum likelihood estimates of the parameters of a	<b>factor</b> analysis model, factor loadings, communalities...	G03CAF
...of the parameters of a factor analysis model,	<b>factor</b> loadings, communalities and residual correlations	G03CAF
Computes	<b>factor</b> score coefficients (for use after G03CAF)	G03CCF
Computes orthogonal polynomials or dummy variables for	<b>factor/classification</b> variable	G04EAF
Analysis of variance, complete	<b>factorial</b> design, treatment means and standard errors	G04CAF
Real sparse nonsymmetric linear systems, incomplete $LU$	<b>factorization</b>	F11DAF
Complex sparse non-Hermitian linear systems, incomplete $LU$	<b>factorization</b>	F11DNF
Real sparse symmetric matrix, incomplete Cholesky	<b>factorization</b>	F11JAF
Complex sparse Hermitian matrix, incomplete Cholesky	<b>factorization</b>	F11JNF
	$LU$ <b>factorization</b> and determinant of real matrix	F03AFF
	$LL^T$ <b>factorization</b> and determinant of real symmetric positive-definite...	F03AEF
Operations with orthogonal matrices, form rows of $Q$ , after $RQ$	<b>factorization</b> by F01QJF	F01QKF
Operations with unitary matrices, form rows of $Q$ , after $RQ$	<b>factorization</b> by F01RJF	F01RKF
	$QR$ or $RQ$ <b>factorization</b> by sequence of plane rotations, complex upper...	F06TRF
	$QR$ or $RQ$ <b>factorization</b> by sequence of plane rotations, complex upper...	F06TSF
	$QRxk$ <b>factorization</b> by sequence of plane rotations, complex upper...	F06TQF
	$QR$ <b>factorization</b> by sequence of plane rotations, rank-1 update of...	F06TPF
	$QR$ <b>factorization</b> by sequence of plane rotations, rank-1 update of...	F06QPF
	$QR$ or $RQ$ <b>factorization</b> by sequence of plane rotations, real upper...	F06QRF
	$QR$ or $RQ$ <b>factorization</b> by sequence of plane rotations, real upper...	F06QSF
Form all or part of orthogonal $Q$ from $QR$	<b>factorization</b> determined by F08AEF or F08BEF	F08AFF
Form all or part of orthogonal $Q$ from $LQ$	<b>factorization</b> determined by F08AHF	F08AJF
Form all or part of unitary $Q$ from $QR$	<b>factorization</b> determined by F08ASF or F08BSF	F08ATF
Form all or part of unitary $Q$ from $LQ$	<b>factorization</b> determined by F08AVF	F08AWF
	All eigenvalues and Schur <b>factorization</b> of complex general matrix (Black Box)	F02GAF
	$QR$ <b>factorization</b> of complex general rectangular matrix	F08ASF
	$LQ$ <b>factorization</b> of complex general rectangular matrix	F08AVF
	$QR$ <b>factorization</b> of complex general rectangular matrix...	F08BSF
	Bunch-Kaufman <b>factorization</b> of complex Hermitian indefinite matrix	F07MRF
	Bunch-Kaufman <b>factorization</b> of complex Hermitian indefinite matrix, packed storage	F07PRF
	Cholesky <b>factorization</b> of complex Hermitian positive-definite band matrix	F07HRF
Computes a split Cholesky	<b>factorization</b> of complex Hermitian positive-definite band matrix $A$	F08UTF
	Cholesky <b>factorization</b> of complex Hermitian positive-definite matrix	F07FRF
	Cholesky <b>factorization</b> of complex Hermitian positive-definite matrix,...	F07GRF
	$LU$ <b>factorization</b> of complex $m$ by $n$ band matrix	F07BRF
	$LU$ <b>factorization</b> of complex $m$ by $n$ matrix	F07ARF
	$RQ$ <b>factorization</b> of complex $m$ by $n$ matrix ( $m \leq n$ )	F01RFF
	Reorder Schur <b>factorization</b> of complex $m$ by $n$ upper trapezoidal matrix ( $m \leq n$ )	F01RGF
	Reorder Schur <b>factorization</b> of complex matrix, form orthonormal basis of right...	F08QUF
	Bunch-Kaufman <b>factorization</b> of complex matrix using unitary similarity...	F08QTF
	Bunch-Kaufman <b>factorization</b> of complex symmetric matrix	F07NRF
	Bunch-Kaufman <b>factorization</b> of complex symmetric matrix, packed storage	F07QRF
Eigenvalues and Schur	<b>factorization</b> of complex upper Hessenberg matrix reduced...	F08PSF
	$LU$ <b>factorization</b> of real almost block diagonal matrix	F01LHF
All eigenvalues and Schur	<b>factorization</b> of real general matrix (Black Box)	F02EAF
	$QR$ <b>factorization</b> of real general rectangular matrix	F08AEF
	$LQ$ <b>factorization</b> of real general rectangular matrix	F08AHF
	$QR$ <b>factorization</b> of real general rectangular matrix with column pivoting	F08BEF
	$LU$ <b>factorization</b> of real $m$ by $n$ band matrix	F07BDF
	$LU$ <b>factorization</b> of real $m$ by $n$ matrix	F07ADF
	$RQ$ <b>factorization</b> of real $m$ by $n$ matrix ( $m \leq n$ )	F01QJF
	$RQ$ <b>factorization</b> of real $m$ by $n$ upper trapezoidal matrix ( $m \leq n$ )	F01QGF
	Reorder Schur <b>factorization</b> of real matrix, form orthonormal basis of right...	F08QGF
	Reorder Schur <b>factorization</b> of real matrix, using orthogonal similarity transformation	F08QFF
	$LU$ <b>factorization</b> of real sparse matrix	F01BRF
	$LU$ <b>factorization</b> of real sparse matrix with known sparsity pattern	F01BSF
	Bunch-Kaufman <b>factorization</b> of real symmetric indefinite matrix	F07MDF
	Bunch-Kaufman <b>factorization</b> of real symmetric indefinite matrix, packed storage	F07PDF
	Cholesky <b>factorization</b> of real symmetric positive-definite band matrix	F07HDF
Computes a split Cholesky	<b>factorization</b> of real symmetric positive-definite band matrix $A$	F08UFF
	Cholesky <b>factorization</b> of real symmetric positive-definite matrix	F07DFD
	Cholesky <b>factorization</b> of real symmetric positive-definite matrix,...	F07GDF
	$LDL^T$ <b>factorization</b> of real symmetric positive-definite...	F01MCF
	$LU$ <b>factorization</b> of real tridiagonal matrix	F01LEF
Eigenvalues and Schur	<b>factorization</b> of real upper Hessenberg matrix reduced...	F08PEF
	$QR$ <b>factorization</b> of $UZ$ or $RQ$ factorization of $ZU$ , $U$ complex upper...	F06TTF
	$QR$ <b>factorization</b> of $UZ$ or $RQ$ factorization of $ZU$ , $U$ real upper...	F06QTF
$QR$ factorization of $UZ$ or $RQ$	<b>factorization</b> of $ZU$ , $U$ complex upper triangular,...	F06TTF

QR factorization of $UZ$ or $RQ$ factorization of $ZU$ , $U$ real upper triangular,...	F06QTF
QR factorization, possibly followed by SVD	F02WDF
Hard fail	P01
Soft fail	P01
Failures	P01
...filter, time-varying, square root covariance filter	G13EAF
...filter, time-invariant, square root covariance filter	G13EBF
Combined measurement and time update, one iteration of Kalman filter, time-invariant, square root covariance filter	G13EBF
Combined measurement and time update, one iteration of Kalman filter, time-varying, square root covariance filter	G13EAF
Multivariate time series, filtering by a transfer function model	G13BBF
Multivariate time series, filtering (pre-whitening) by an ARIMA model	G13BAF
ODEs, IVP, root-finding diagnostics for D02QFF and D02QGF	D02QYF
ODEs, IVP, Adams method with root-finding (forward communication, comprehensive)	D02QFF
ODEs, IVP, Adams method with root-finding (reverse communication, comprehensive)	D02QGF
Elliptic PDE, solution of finite difference equations by a multigrid technique	D03EDF
Elliptic PDE, solution of finite difference equations by SIP, five-point two-dimensional...	D03EBF
Elliptic PDE, solution of finite difference equations by SIP, five-point two-dimensional...	D03UAF
Elliptic PDE, solution of finite difference equations by SIP for seven-point three-dimensional...	D03ECF
Elliptic PDE, solution of finite difference equations by SIP, seven-point three-dimensional...	D03UBF
ODEs, general nonlinear boundary value problem, finite difference technique with deferred correction,...	D02RAF
ODEs, boundary value problem, finite difference technique with deferred correction,...	D02GBF
ODEs, boundary value problem, finite difference technique with deferred correction,...	D02GAF
General system of parabolic PDEs, method of lines, finite differences, one space variable	D03PCF
General system of parabolic PDEs, method of lines, finite differences, one space variable	D03PHF
General system of parabolic PDEs, coupled DAEs, method of lines, finite differences, remeshing, one space variable	D03PPF
General system of parabolic PDEs, method of lines, finite differences, remeshing, two space variables, rectangular region	D03RAF
General system of second-order PDEs, method of lines, finite differences, remeshing, two space variables, rectangular region	D03RBF
...non-adaptive, finite interval with provision for indefinite integrals	D01ARF
One-dimensional quadrature, non-adaptive, finite interval	D01BDF
One-dimensional quadrature, adaptive, finite interval, allowing for singularities at user-specified break-points	D01ALF
One-dimensional quadrature, adaptive, finite interval, method suitable for oscillating functions	D01AKF
One-dimensional quadrature, adaptive, finite interval, method suitable for oscillating functions	D01AKF
One-dimensional quadrature, adaptive, finite interval, strategy due to Patterson,...	D01AHF
One-dimensional quadrature, adaptive, finite interval, strategy due to Piessens and de Doncker,...	D01AJF
One-dimensional quadrature, adaptive, finite interval, strategy due to Piessens and de Doncker,...	D01AJF
One-dimensional quadrature, adaptive, finite interval, variant of D01AJF efficient on vector machines	D01ATF
One-dimensional quadrature, adaptive, finite interval, variant of D01AKF efficient on vector machines	D01AUF
One-dimensional quadrature, adaptive, finite interval, weight function $1/(x-c)$ ,...	D01AQF
One-dimensional quadrature, adaptive, finite interval, weight function $\cos(\omega x)$ or $\sin(\omega x)$	D01ANF
One-dimensional quadrature, adaptive, finite interval, weight function with end-point singularities...	D01APF
One-dimensional quadrature, non-adaptive, finite interval with provision for indefinite integrals	D01ARF
Second-order Sturm–Liouville problem, regular system, finite range, eigenvalue only	D02KAF
Two-dimensional quadrature, finite region	D01DAF
Second-order Sturm–Liouville problem, regular/singular system, finite/infinite range, eigenvalue and eigenfunction,...	D02KEF
Second-order Sturm–Liouville problem, regular/singular system, finite/infinite range, eigenvalue only, user-specified break-points	D02KDF
Two-way contingency table analysis, with $\chi^2$ /Fisher's exact test	G01AFF
Least-squares cubic spline curve fit, automatic knot placement	E02BEF
Least-squares surface fit, bicubic splines	E02DAF
Least-squares surface fit by bicubic splines with automatic knot placement,...	E02DCF
Least-squares surface fit by bicubic splines with automatic knot placement, scattered data	E02DDF
Minimax curve fit by polynomials	E02ACF
Least-squares curve fit, by polynomials, arbitrary data points	E02ADF
Least-squares surface fit by polynomials, data on lines	E02CAF
Fit cubic smoothing spline, smoothing parameter estimated	G10ACF
Fit cubic smoothing spline, smoothing parameter given	G10ABF
Least-squares curve cubic spline fit (including interpolation)	E02BAF
Least-squares polynomial fit, special data points (including interpolation)	E02AFF
Performs the $\chi^2$ goodness of fit test, for standard continuous distributions	G08CGF
Goodness of fit tests	G08
Least-squares polynomial fit, values and derivatives may be constrained, arbitrary data points	E02AGF
Fits a general linear regression model for new dependent variable	G02DGF
Fits a general (multiple) linear regression model	G02DAF
Fits a generalized linear model with binomial errors	G02GBF
Fits a generalized linear model with gamma errors	G02GDF
Fits a generalized linear model with Normal errors	G02GAF
Fits a generalized linear model with Poisson errors	G02GCF
Fits a linear regression model by forward selection	G02EEF
Fits Cox's proportional hazard model	G12BAF
Evaluation of fitted bicubic spline at a mesh of points	E02DFF
Evaluation of fitted bicubic spline at a vector of points	E02DEF
Evaluation of fitted cubic spline, definite integral	E02BDF
Evaluation of fitted cubic spline, function and derivatives	E02BCF
Evaluation of fitted cubic spline, function only	E02BBF
Derivative of fitted polynomial in Chebyshev series form	E02AHF
Integral of fitted polynomial in Chebyshev series form	E02AJF
Evaluation of fitted polynomial in one variable, from Chebyshev series form	E02AKF
Evaluation of fitted polynomial in one variable from Chebyshev series form...	E02AEF
Evaluation of fitted polynomial in two variables	E02CBF
Evaluation of fitted rational function as computed by E02RAF	E02RBF
Interpolating functions, fitting bicubic spline, data on rectangular grid	E01DAF
Sort two-dimensional data into panels for fitting bicubic splines	E02ZAF
Computes a five-point summary (median, hinges and extremes)	G01ALF
Elliptic PDE, solution of finite difference equations by SIP, five-point two-dimensional molecule, iterate to convergence	D03EBF
Elliptic PDE, solution of finite difference equations by SIP, five-point two-dimensional molecule, one iteration	D03UAF
...method of lines, upwind scheme using numerical flux function based on Riemann solver, one space variable	D03PPF
...method of lines, upwind scheme using numerical flux function based on Riemann solver, one space variable	D03PLF
...method of lines, upwind scheme using numerical flux function based on Riemann solver, remeshing, one space variable	D03PSF
Univariate time series, update state set for forecasting	G13AGF
Multivariate time series, update state set for forecasting from multi-input model	G13BGF
Univariate time series, forecasting from state set	G13AHF
Multivariate time series, forecasting from state set of multi-input model	G13BHF
Multivariate time series, forecasts and their standard errors	G13DJF
Multivariate time series, updates forecasts and their standard errors	G13DKF
Multivariate time series, state set and forecasts from fully specified multi-input model	G13BJF
Univariate time series, state set and forecasts, from fully specified seasonal ARIMA model	G13AJF
ODEs, IVP, Adams method with root-finding (forward communication, comprehensive)	D02QFF
Fits a linear regression model by forward selection	G02EEF
Two-dimensional complex discrete Fourier transform	C06FUF

Three-dimensional complex discrete	<b>Fourier</b> transform	C06FXF
Single one-dimensional complex discrete	<b>Fourier</b> transform, complex data format	C06PCF
Two-dimensional complex discrete	<b>Fourier</b> transform, complex data format	C06PUF
Three-dimensional complex discrete	<b>Fourier</b> transform, complex data format	C06PXF
Single one-dimensional real discrete	<b>Fourier</b> transform, extra workspace for greater speed	C06FAF
Single one-dimensional Hermitian discrete	<b>Fourier</b> transform, extra workspace for greater speed	C06FBF
Single one-dimensional complex discrete	<b>Fourier</b> transform, extra workspace for greater speed	C06FCF
Single one-dimensional real discrete	<b>Fourier</b> transform, no extra workspace	C06EAF
Single one-dimensional Hermitian discrete	<b>Fourier</b> transform, no extra workspace	C06EBF
Single one-dimensional complex discrete	<b>Fourier</b> transform, no extra workspace	C06ECF
One-dimensional complex discrete	<b>Fourier</b> transform of multi-dimensional data	C06FFF
Multi-dimensional complex discrete	<b>Fourier</b> transform of multi-dimensional data	C06FJF
One-dimensional complex discrete	<b>Fourier</b> transform of multi-dimensional data (using complex data type)	C06PFF
Multi-dimensional complex discrete	<b>Fourier</b> transform of multi-dimensional data (using complex data type)	C06PJF
...one-dimensional real and Hermitian complex discrete	<b>Fourier</b> transform, using complex data format for Hermitian sequences	C06PAF
Multiple one-dimensional real discrete	<b>Fourier</b> transforms	C06PFF
Multiple one-dimensional Hermitian discrete	<b>Fourier</b> transforms	C06PQF
Multiple one-dimensional complex discrete	<b>Fourier</b> transforms	C06FRF
Multiple one-dimensional complex discrete	<b>Fourier</b> transforms using complex data format	C06PRF
Multiple one-dimensional complex discrete	<b>Fourier</b> transforms using complex data format and sequences...	C06PSF
Multiple one-dimensional real and Hermitian complex discrete	<b>Fourier</b> transforms, using complex data format for Hermitian...	C06PPF
Multiple one-dimensional real and Hermitian complex discrete	<b>Fourier</b> transforms, using complex data format for Hermitian...	C06PQF
Linear non-singular	<b>Fredholm</b> integral equation, second kind, smooth kernel	D05ABF
Linear non-singular	<b>Fredholm</b> integral equation, second kind, split kernel	D05AAF
...spectrum using spectral smoothing by the trapezium	<b>Frequency</b> count for G11SAF	G11SBF
...spectrum using spectral smoothing by the trapezium	<b>frequency</b> (Daniell) window	G13CBF
Mean, variance, skewness, kurtosis, etc, one variable, from	<b>frequency</b> (Daniell) window	G13CDF
	<b>frequency</b> table	G01ADF
	<b>Frequency</b> table from raw data	G01AEF
	<b>Fresnel</b> integral $C(x)$	S20ADF
	<b>Fresnel</b> integral $S(x)$	S20ACF
	<b>Friedman</b> two-way analysis of variance on $k$ matched samples	G08AEF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex band matrix	F06UBF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex general matrix	F06UAF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex Hermitian...	F06UEF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex Hermitian...	F06UCF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex Hermitian...	F06UDF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex Hessenberg matrix	F06UMF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex symmetric...	F06UHF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex symmetric...	F06UFF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex symmetric...	F06UGF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex...	F06UJF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex triangular...	F06ULF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, complex triangular...	F06UKF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real band matrix	F06RBF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real general matrix	F06RAF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real Hessenberg matrix	F06RMF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real symmetric band matrix	F06REF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real symmetric matrix	F06RCF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real symmetric matrix,...	F06RDF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real...	F06RJF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real triangular...	F06RLF
1-norm, $\infty$ -norm,	<b>Frobenius</b> norm, largest absolute element, real triangular...	F06RKF
Multivariate time series,	<b>gain</b> , phase, bounds, univariate and bivariate (cross) spectra	G13CFF
Computes probabilities for the	<b>gamma</b> distribution	G01EFF
Computes deviates for the	<b>gamma</b> distribution	G01FFF
Generates a vector of pseudo-random numbers from a	<b>gamma</b> distribution	G05FFF
Fits a generalized linear model with	<b>gamma</b> errors	G02GDF
	<b>Gamma</b> function	S14AAF
	Log <b>Gamma</b> function	S14ABF
	Incomplete <b>Gamma</b> functions $P(a, x)$ and $Q(a, x)$	S14BAF
Provides the mathematical constant $\gamma$ (Euler's Constant)		X01ABF
Performs the	<b>gaps</b> test for randomness	G08EDF
	<b>Gather</b> and set to zero complex sparse vector	F06GVF
	<b>Gather</b> and set to zero real sparse vector	F06EVF
	<b>Gather</b> complex sparse vector	F06GUF
	<b>Gather</b> real sparse vector	F06EUF
Kernel density estimate using	<b>Gaussian</b> kernel	G10BAF
One-dimensional	<b>Gaussian</b> quadrature	D01BAF
Multi-dimensional	<b>Gaussian</b> quadrature over hyper-rectangle	D01BFF
Calculation of weights and abscissae for	<b>Gaussian</b> quadrature rules, general choice of rule	D01BCF
Pre-computed weights and abscissae for	<b>Gaussian</b> quadrature rules, restricted choice of rule	D01BBF
Real general	<b>Gauss–Markov</b> linear model (including weighted least-squares)	F04JLF
Complex general	<b>Gauss–Markov</b> linear model (including weighted least-squares)	F04KLF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and modified Newton algorithm...	E04GDF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and modified Newton algorithm...	E04GZF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and modified Newton algorithm...	E04FCF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and modified Newton algorithm...	E04FYF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and modified Newton algorithm...	E04HEF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and modified Newton algorithm,...	E04HYF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and quasi-Newton algorithm...	E04GBF
Unconstrained minimum of a sum of squares, combined	<b>Gauss–Newton</b> and quasi-Newton algorithm,...	E04GYF
All eigenvalues and optionally eigenvectors of	<b>generalized</b> banded real symmetric-definite eigenproblem (Black Box)	F02FHF
Reduction to standard form of complex Hermitian-definite	<b>generalized</b> complex eigenproblem by $QZ$ algorithm (Black Box)	F02GJF
Reduction to standard form of real symmetric-definite	<b>generalized</b> eigenproblem $Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x, \dots$	F08SSF
Reduction of real symmetric-definite banded	<b>generalized</b> eigenproblem $Ax = \lambda Bx$ to standard form $Cy = \lambda y, \dots$	F08SEF
Reduction of complex Hermitian-definite banded	<b>generalized</b> eigenproblem $Ax = \lambda Bx$ to standard form $Cy = \lambda y, \dots$	F08UEF
Reduction to standard form of complex Hermitian-definite	<b>generalized</b> eigenproblem $Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x, \dots$	F08USF
Reduction to standard form of real symmetric-definite	<b>generalized</b> eigenproblem $Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x, \dots$	F08TSF
All eigenvalues and optionally eigenvectors of	<b>generalized</b> eigenproblem by $QZ$ algorithm, real matrices (Black Box)	F08TEF
Computes estimable function of a	<b>generalized</b> linear model and its standard error	F02BJF
Fits a	<b>generalized</b> linear model with binomial errors	G02GNF
Fits a	<b>generalized</b> linear model with gamma errors	G02GBF
Fits a	<b>generalized</b> linear model with Normal errors	G02GDF
Fits a	<b>generalized</b> linear model with Poisson errors	G02GAF
Computes orthogonal rotations for loading matrix,	<b>generalized</b> orthomax criterion	G02GCF
All eigenvalues and eigenvectors of real symmetric-definite	<b>generalized</b> problem (Black Box)	G03BAF
All eigenvalues and eigenvectors of complex Hermitian-definite	<b>generalized</b> problem (Black Box)	F02PFF
Eigenvector of	<b>generalized</b> real banded eigenproblem by inverse iteration	F02HDF
Reduction to standard form,	<b>generalized</b> real symmetric-definite banded eigenproblem	F02SDF
		F01BVF

	<b>Generate</b> complex elementary reflection	F06HRF
	<b>Generate</b> complex plane rotation, storing tangent, real cosine	F06CAF
	<b>Generate</b> complex plane rotation, storing tangent, real sine	F06CBF
	<b>Generate</b> next term from reference vector for ARMA time...	G05EWF
	<b>Generate</b> orthogonal transformation matrices from reduction...	F08KFF
	<b>Generate</b> orthogonal transformation matrix from reduction...	F08NFF
	<b>Generate</b> orthogonal transformation matrix from reduction...	F08FFF
	<b>Generate</b> orthogonal transformation matrix from reduction...	F08GFF
	<b>Generate</b> real elementary reflection, LINPACK style	F06FSF
	<b>Generate</b> real elementary reflection, NAG style	F06FRF
	<b>Generate</b> real Jacobi plane rotation	F06BEF
	<b>Generate</b> real plane rotation	F06AAF
	<b>Generate</b> real plane rotation, storing tangent	F06BAF
	<b>Generate</b> sequence of complex plane rotations	F06HQF
	<b>Generate</b> sequence of real plane rotations	F06FQF
	<b>Generate</b> unitary transformation matrices from reduction...	F08KTF
	<b>Generate</b> unitary transformation matrix from reduction...	F08NTF
	<b>Generate</b> unitary transformation matrix from reduction...	F08FTF
	<b>Generate</b> unitary transformation matrix from reduction...	F08GTF
	<b>Generate</b> weights for use in solving Volterra equations	D05BWF
	<b>Generate</b> weights for use in solving weakly singular Abel-type...	D05BYF
	<b>Generates</b> a realisation of a multivariate time series from...	G05HDF
	<b>Generates</b> a vector of pseudo-random numbers from...	G05FEF
	<b>Generates</b> a vector of pseudo-random numbers from...	G05FFF
	<b>Generates</b> a vector of pseudo-random variates from...	G05FSF
	<b>Generates</b> a vector of random numbers from a Normal distribution	G05FDF
	<b>Generates</b> a vector of random numbers from a uniform distribution	G05FAF
	<b>Generates</b> a vector of random numbers from...	G05FBF
	Set up reference vector for <b>generating</b> pseudo-random integers, binomial distribution	G05EDF
	Set up reference vector for <b>generating</b> pseudo-random integers, hypergeometric distribution	G05EFF
	Set up reference vector for <b>generating</b> pseudo-random integers, negative binomial distribution	G05EEF
	Set up reference vector for <b>generating</b> pseudo-random integers, Poisson distribution	G05ECF
	Set up reference vector for <b>generating</b> pseudo-random integers, uniform distribution	G05EBF
	Save state of random number <b>generating</b> routines	G05CFF
	Restore state of random number <b>generating</b> routines	G05CGF
	Initialise random number <b>generating</b> routines to give non-repeatable sequence	G05CCF
	Initialise random number <b>generating</b> routines to give repeatable sequence	G05CBF
...integration of function defined by data values,	<b>Gill–Miller</b> method	D01GAF
	Performs the $\chi^2$ <b>goodness</b> of fit test, for standard continuous distributions	G08CGF
	<b>Goodness</b> of fit tests	G08
Unconstrained minimum, pre-conditioned conjugate	<b>gradient</b> algorithm, function of several variables using...	E04DGF
Estimate (using numerical differentiation)	<b>gradient</b> and/or Hessian of a function	E04XAF
Real sparse symmetric linear systems, pre-conditioned conjugate	<b>gradient</b> or Lanczos	F11GBF
Solution of real sparse symmetric linear system, conjugate	<b>gradient/Lanczos</b> method, Jacobi or SSOR preconditioner (Black Box)	F11JEF
Solution of complex sparse Hermitian linear system, conjugate	<b>gradient/Lanczos</b> method, Jacobi or SSOR preconditioner (Black Box)	F11JSF
Solution of real sparse symmetric linear system, conjugate	<b>gradient/Lanczos</b> method, preconditioner computed by F11JAF...	F11JCF
Solution of complex sparse Hermitian linear system, conjugate	<b>gradient/Lanczos</b> method, preconditioner computed by F11JNF...	F11JQF
	<b>Gram–Schmidt</b> orthogonalisation of $n$ vectors of order $m$	F05AAF
	Extract <b>grid</b> data from D03RBF	D03RZF
	Check initial <b>grid</b> data in D03RBF	D03RYF
	Computes test statistic for equality of within- <b>group</b> covariance matrices and matrices for discriminant analysis	G03DAF
	Computes Mahalanobis squared distances for <b>group</b> or pooled variance-covariance matrices (for use after G03DAF)	G03DBF
...for parameters of the Normal distribution from	<b>grouped</b> and/or censored data	G07BBF
	Allocates observations to <b>groups</b> according to selected rules (for use after G03DAF)	G03DCF
	<b>Hankel</b> functions $H_{\nu+a}^{(j)}(z)$ , $j = 1, 2$ , real $a \geq 0, \dots$	S17DLF
	<b>Hard</b> fail	P01
	Fits Cox's proportional <b>hazard</b> model	G12BAF
Creates the risk sets associated with the Cox proportional	<b>hazards</b> model for fixed covariates	G12ZAF
	Elliptic PDE, <b>Helmholtz</b> equation, three-dimensional Cartesian co-ordinates	D03FAF
Interpolating functions, monotonicity-preserving, piecewise cubic	<b>Hermite</b> , one variable	E01BEF
	Matrix-vector product, complex <b>Hermitian</b> band matrix	F06SDF
...Frobenius norm, largest absolute element, complex	<b>Hermitian</b> band matrix	F06UEF
	Unitary reduction of complex <b>Hermitian</b> band matrix to real symmetric tridiagonal form	F08HSF
All eigenvalues and optionally all eigenvectors of complex	<b>Hermitian</b> band matrix, using divide and conquer	F08HQF
Single one-dimensional real and	<b>Hermitian</b> complex discrete Fourier transform, using...	C06PAF
Multiple one-dimensional real and	<b>Hermitian</b> complex discrete Fourier transforms, using...	C06PPF
Multiple one-dimensional real and	<b>Hermitian</b> complex discrete Fourier transforms, using...	C06PQF
Single one-dimensional	<b>Hermitian</b> discrete Fourier transform, extra workspace...	C06EBF
Single one-dimensional	<b>Hermitian</b> discrete Fourier transform, no extra workspace	C06EUF
Multiple one-dimensional	<b>Hermitian</b> discrete Fourier transforms	C06FQF
Bunch–Kaufman factorization of complex	<b>Hermitian</b> indefinite matrix	F07MRF
Estimate condition number of complex	<b>Hermitian</b> indefinite matrix, matrix already factorized by F07MRF	F07MUF
Inverse of complex	<b>Hermitian</b> indefinite matrix, matrix already factorized by F07MRF	F07MWF
Estimate condition number of complex	<b>Hermitian</b> indefinite matrix, matrix already factorized by F07PRF...	F07PUF
Inverse of complex	<b>Hermitian</b> indefinite matrix, matrix already factorized by F07PRF...	F07PWF
Bunch–Kaufman factorization of complex	<b>Hermitian</b> indefinite matrix, packed storage	F07PRF
Refined solution with error bounds of complex	<b>Hermitian</b> indefinite system of linear equations,...	F07MVF
Solution of complex	<b>Hermitian</b> indefinite system of linear equations,...	F07MSF
Solution of complex	<b>Hermitian</b> indefinite system of linear equations,...	F07PSF
Refined solution with error bounds of complex	<b>Hermitian</b> indefinite system of linear equations,...	F07PVF
Solution of complex sparse	<b>Hermitian</b> linear system, conjugate gradient/Lanczos method,...	F11JSF
Solution of complex sparse	<b>Hermitian</b> linear system, conjugate gradient/Lanczos method,...	F11JQF
Apply complex similarity rotation to 2 by 2	<b>Hermitian</b> matrix	F06CHF
Matrix-vector product, complex	<b>Hermitian</b> matrix	F06SCF
Rank-1 update, complex	<b>Hermitian</b> matrix	F06SPF
Rank-2 update, complex	<b>Hermitian</b> matrix	F06SRF
...Frobenius norm, largest absolute element, complex	<b>Hermitian</b> matrix	F06UCF
Rank- $k$ update of complex	<b>Hermitian</b> matrix	F06ZPF
Rank- $2k$ update of complex	<b>Hermitian</b> matrix	F06ZRF
...generated by applying SSOR to complex sparse	<b>Hermitian</b> matrix	F11JRF
Unitary similarity transformation of	<b>Hermitian</b> matrix as a sequence of plane rotations	F06TMF
All eigenvalues and eigenvectors of complex	<b>Hermitian</b> matrix (Black Box)	F02HAF
Selected eigenvalues and eigenvectors of complex	<b>Hermitian</b> matrix (Black Box)	F02HCF
	Complex sparse <b>Hermitian</b> matrix, incomplete Cholesky factorization	F11JNF
Matrix-matrix product, one complex	<b>Hermitian</b> matrix, one complex rectangular matrix	F06ZCF
...Frobenius norm, largest absolute element, complex	<b>Hermitian</b> matrix, packed storage	F06UDF
All eigenvalues and optionally all eigenvectors of complex	<b>Hermitian</b> matrix, packed storage, using divide and conquer	F08GQF
Complex sparse	<b>Hermitian</b> matrix reorder routine	F11ZPF

Unitary reduction of complex Hermitian matrix to real symmetric tridiagonal form	F08FSF
Unitary reduction of complex Hermitian matrix to real symmetric tridiagonal form, packed storage	F08GSF
All eigenvalues and optionally all eigenvectors of complex Hermitian matrix, using divide and conquer	F08FQF
...symmetric tridiagonal matrix, reduced from complex Hermitian matrix, using implicit $QL$ or $QR$	F08JSF
Complex sparse Hermitian matrix vector multiply	F11XSF
Matrix-vector product, complex Hermitian packed matrix	F06SEF
Rank-1 update, complex Hermitian packed matrix	F06SQF
Rank-2 update, complex Hermitian packed matrix	F06SSF
Cholesky factorization of complex Hermitian positive-definite band matrix	F07HRF
Computes a split Cholesky factorization of complex Hermitian positive-definite band matrix $A$	F08UTF
Estimate condition number of complex Hermitian positive-definite band matrix,...	F07HUF
Refined solution with error bounds of complex Hermitian positive-definite band system of linear equations,...	F07HVF
Solution of complex Hermitian positive-definite band system of linear equations,...	F07HSF
Cholesky factorization of complex Hermitian positive-definite matrix	F07FRF
...positive-definite tridiagonal matrix, reduced from complex Hermitian positive-definite matrix	F08JUF
Estimate condition number of complex Hermitian positive-definite matrix,...	F07FUF
Inverse of complex Hermitian positive-definite matrix,...	F07FWF
Estimate condition number of complex Hermitian positive-definite matrix,...	F07GUF
Inverse of complex Hermitian positive-definite matrix,...	F07GWF
Cholesky factorization of complex Hermitian positive-definite matrix, packed storage	F07GRF
Refined solution with error bounds of complex Hermitian positive-definite system of linear equations,...	F07FVF
Solution of complex Hermitian positive-definite system of linear equations,...	F07FSF
Solution of complex Hermitian positive-definite system of linear equations,...	F07GSF
Refined solution with error bounds of complex Hermitian positive-definite system of linear equations,...	F07GVF
Complex conjugate of Hermitian sequence	C06GBF
Complex conjugate of multiple Hermitian sequences	C06GQF
...Fourier transform, using complex data format for Hermitian sequences	C06PAF
Convert Hermitian sequences to general complex sequences	C06GSF
Reduction of complex Hermitian-definite banded generalized eigenproblem $Ax = \lambda Bx...$	F08USF
Reduction to standard form of complex Hermitian-definite generalized eigenproblem $Ax = \lambda Bx,...$	F08SSF
Reduction to standard form of complex Hermitian-definite generalized eigenproblem $Ax = \lambda Bx,...$	F08TSF
All eigenvalues and eigenvectors of complex Hermitian-definite generalized problem (Black Box)	F02HDF
Orthogonal reduction of real general matrix to upper Hessenberg form	F08NEF
Unitary reduction of complex general matrix to upper Hessenberg form	F08NSF
Generate orthogonal transformation matrix from reduction to Hessenberg form determined by F08NEF	F08NFF
Apply orthogonal transformation matrix from reduction to Hessenberg form determined by F08NEF	F08NGF
Generate unitary transformation matrix from reduction to Hessenberg form determined by F08NSF	F08NTF
Apply unitary transformation matrix from reduction to Hessenberg form determined by F08NSF	F08NUF
$QR$ or $RQ$ factorization by sequence of plane rotations, real upper Hessenberg matrix	F06QRF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real Hessenberg matrix	F06RMF
...by sequence of plane rotations, complex upper Hessenberg matrix	F06TRF
...Frobenius norm, largest absolute element, complex Hessenberg matrix	F06UMF
Selected right and/or left eigenvectors of real upper Hessenberg matrix by inverse iteration	F08PKF
Selected right and/or left eigenvectors of complex upper Hessenberg matrix by inverse iteration	F08PXF
Compute upper Hessenberg matrix by sequence of plane rotations,...	F06TVF
Compute upper Hessenberg matrix by sequence of plane rotations,...	F06QVF
Eigenvalues and Schur factorization of complex upper Hessenberg matrix reduced from complex general matrix	F08PSF
Eigenvalues and Schur factorization of real upper Hessenberg matrix reduced from real general matrix	F08PEF
Estimate (using numerical differentiation) gradient and/or Hessian of a function	E04XAF
Check user's routine for calculating Hessian of a sum of squares	E04YBF
Two-way analysis of variance, hierarchical classification, subgroups of unequal size	G04AGF
Hierarchical cluster analysis	G03ECF
...weight function $1/(x - c)$ , Cauchy principal value (Hilbert transform)	D01AQF
Computes a five-point summary (median, hinges and extremes)	G01ALF
Lineprinter histogram of one variable	G01AJF
Modified HLL Riemann solver for Euler equations in conservative form,...	D03PWF
Calculates a robust estimation of a correlation matrix, Huber's weight function	G02HKF
Set up reference vector for generating pseudo-random integers, hypergeometric distribution	G05EFF
Hypergeometric distribution function	G01BLF
Multi-dimensional Gaussian quadrature over hyper-rectangle	D01FBF
Multi-dimensional adaptive quadrature over hyper-rectangle	D01FCF
Multi-dimensional adaptive quadrature over hyper-rectangle, Monte Carlo method	D01GBF
Multi-dimensional adaptive quadrature over hyper-rectangle, multiple integrands	D01EAF
...matrix, reduced from real symmetric matrix using implicit $QL$ or $QR$	F08JEF
...reduced from complex Hermitian matrix, using implicit $QL$ or $QR$	F08JSF
Implicit/algebraic ODEs, stiff IVP, banded Jacobian...	D02NHF
Implicit/algebraic ODEs, stiff IVP, full Jacobian (comprehensive)	D02NGF
Implicit/algebraic ODEs, stiff IVP (reverse communication,...	D02NNF
Implicit/algebraic ODEs, stiff IVP, sparse Jacobian (comprehensive)	D02NJF
Multivariate time series, noise spectrum, bounds, impulse response function and its standard error	G13CGF
Real sparse symmetric matrix, incomplete Cholesky factorization	F11JAF
Complex sparse Hermitian matrix, incomplete Cholesky factorization	F11JNF
Solution of linear system involving incomplete Cholesky preconditioning matrix generated by F11JAF	F11JBF
Solution of complex linear system involving incomplete Cholesky preconditioning matrix generated by F11JNF	F11JPF
Incomplete Gamma functions $P(a, x)$ and $Q(a, x)$	S14BAF
Real sparse nonsymmetric linear systems, incomplete LU factorization	F11DAF
Complex sparse non-Hermitian linear systems, incomplete LU factorization	F11DNF
Solution of linear system involving incomplete LU preconditioning matrix generated by F11DAF	F11DBF
Solution of complex linear system involving incomplete LU preconditioning matrix generated by F11DNF	F11DPF
Bunch-Kaufman factorization of real symmetric indefinite matrix	F07MDF
Bunch-Kaufman factorization of complex Hermitian indefinite matrix	F07MRF
Estimate condition number of real symmetric indefinite matrix, matrix already factorized by F07MDF	F07MGF
Inverse of real symmetric indefinite matrix, matrix already factorized by F07MDF	F07MJF
Estimate condition number of complex Hermitian indefinite matrix, matrix already factorized by F07MRF	F07MUF
Inverse of complex Hermitian indefinite matrix, matrix already factorized by F07MRF	F07MWF
Estimate condition number of real symmetric indefinite matrix, matrix already factorized by F07PDF,...	F07PGF
Inverse of real symmetric indefinite matrix, matrix already factorized by F07PDF,...	F07PJF
Estimate condition number of complex Hermitian indefinite matrix, matrix already factorized by F07PRF,...	F07PUF
Inverse of complex Hermitian indefinite matrix, matrix already factorized by F07PRF,...	F07PWF
Bunch-Kaufman factorization of real symmetric indefinite matrix, packed storage	F07PDF
Bunch-Kaufman factorization of complex Hermitian indefinite matrix, packed storage	F07PRF
Refined solution with error bounds of real symmetric indefinite system of linear equations, multiple right-hand sides	F07MHF
Refined solution with error bounds of complex Hermitian indefinite system of linear equations, multiple right-hand sides	F07MVF
Solution of real symmetric indefinite system of linear equations, multiple right-hand sides,...	F07MEF
Solution of complex Hermitian indefinite system of linear equations, multiple right-hand sides,...	F07MSF
Solution of real symmetric indefinite system of linear equations, multiple right-hand sides,...	F07PEF
Solution of complex Hermitian indefinite system of linear equations, multiple right-hand sides,...	F07PSF
Refined solution with error bounds of real symmetric indefinite system of linear equations, multiple right-hand sides,...	F07PHF
Refined solution with error bounds of complex Hermitian indefinite system of linear equations, multiple right-hand sides,...	F07PVF
Index, complex vector element with largest absolute value	F06JMF

	<b>Index</b> , real vector element with largest absolute value	F06JLF
	Computes cluster <b>indicator</b> variable (for use after G03ECF)	G03EJF
	Return value of error <b>indicator/terminate</b> with error message	P01ABF
$L_1$ -approximation by general linear function subject to linear <b>inequality</b> constraints		E02GBF
One-dimensional quadrature, adaptive, infinite or semi- <b>infinite</b> interval		D01AMF
One-dimensional quadrature, adaptive, infinite or semi- <b>infinite</b> interval		D01AMF
One-dimensional quadrature, adaptive, semi- <b>infinite</b> interval, weight function $\cos(\omega x)$ or $\sin(\omega x)$		D01ASF
One-dimensional quadrature, adaptive, <b>infinite</b> or semi-infinite interval		D01AMF
One-dimensional quadrature, adaptive, <b>infinite</b> or semi-infinite interval		D01AMF
...Sturm–Liouville problem, regular/singular system, finite/ <b>infinite</b> range, eigenvalue and eigenfunction, user-specified break-points		D02KEF
...Sturm–Liouville problem, regular/singular system, finite/ <b>infinite</b> range, eigenvalue only, user-specified break-points		D02KDF
Bounded <b>influence</b> See Robust		
Calculates standardized residuals and <b>influence</b> statistics		G02FAF
Real inner product added to <b>initial</b> value, basic/additional precision		X03AAF
Complex inner product added to <b>initial</b> value, basic/additional precision		X03ABF
Matrix <b>initialisation</b> , complex rectangular matrix		F06THF
Matrix <b>initialisation</b> , real rectangular matrix		F06QHF
<b>Initialise</b> random number generating routines to give non-repeatable...		G05CCF
<b>Initialise</b> random number generating routines to give repeatable...		G05CBF
Real <b>inner</b> product added to initial value, basic/additional precision		X03AAF
Complex <b>inner</b> product added to initial value, basic/additional precision		X03ABF
Multivariate time series, estimation of multi- <b>input</b> model		G13BEF
...series, update state set for forecasting from multi- <b>input</b> model		G13BGF
Multivariate time series, forecasting from state set of multi- <b>input</b> model		G13BHF
...set and forecasts from fully specified multi- <b>input</b> model		G13BJF
<b>Input</b> output utilities		X04
The largest representable <b>integer</b>		X02BBF
...rectangular matrix, permutations represented by an <b>integer</b> array		F06QJF
...rectangular matrix, permutations represented by an <b>integer</b> array		F06VJF
<b>Integer</b> LP problem (dense)		H02BBF
Pseudo-random <b>integer</b> , Poisson distribution		G05DRF
<b>Integer</b> programming solution, supplies further information on...		H02BZF
Evaluation of fitted cubic spline, definite <b>integral</b>		E02BDF
Dawson's <b>integral</b>		S15AFF
Fresnel <b>integral</b> $C(x)$		S20ADF
Exponential <b>integral</b> $E_1(x)$		S13AAF
Linear non-singular Fredholm <b>integral</b> equation, second kind, smooth kernel		D05ABF
Linear non-singular Fredholm <b>integral</b> equation, second kind, split kernel		D05AAF
Degenerate symmetrised elliptic <b>integral</b> of 1st kind $R_C(x, y)$		S21BAF
Symmetrised elliptic <b>integral</b> of 1st kind $R_F(x, y, z)$		S21BBF
Symmetrised elliptic <b>integral</b> of 2nd kind $R_D(x, y, z)$		S21BCF
Symmetrised elliptic <b>integral</b> of 3rd kind $R_J(x, y, z, r)$		S21BDF
<b>Integral</b> of fitted polynomial in Chebyshev series form		E02AJF
Interpolated values, interpolant computed by E01BEF, definite <b>integral</b> , one variable		E01BHF
Cosine <b>integral</b> $Ci(x)$		S13ACF
Sine <b>integral</b> $Si(x)$		S13ADF
Fresnel <b>integral</b> $S(x)$		S20ACF
...finite interval with provision for indefinite <b>integrals</b>		D01ARF
Numerical <b>integration</b>		D01
ODEs, IVP, <b>integration</b> diagnostics for D02PCF and D02PDF		D02PYF
One-dimensional quadrature, <b>integration</b> of function defined by data values, Gill–Miller method		D01GAF
ODEs, IVP, Runge–Kutta method, <b>integration</b> over one step		D02PDF
...Runge–Kutta method, until function of solution is zero, <b>integration</b> over range with intermediate output (simple driver)		D02BJF
ODEs, IVP, Runge–Kutta method, <b>integration</b> over range with output		D02PCF
ODEs, IVP, <b>integrator</b> diagnostics, for use with D02M–N routines		D02NYF
ODEs, IVP, set-up for continuation calls to <b>integrator</b> , for use with D02M–N routines		D02NZF
...problem, shooting and matching technique, allowing <b>interior</b> matching point, general parameters to be determined		D02AGF
ODEs, IVP, interpolation for D02M–N routines, natural <b>interpolant</b>		D02MZF
ODEs, IVP, interpolation for D02M–N routines, natural <b>interpolant</b>		D02XJF
ODEs, IVP, interpolation for D02M–N routines, $C_1$ <b>interpolant</b>		D02XKF
Interpolated values, <b>interpolant</b> computed by E01BEF, definite integral, one variable		E01BHF
Interpolated values, <b>interpolant</b> computed by E01BEF, function and first derivative,...		E01BGF
Interpolated values, <b>interpolant</b> computed by E01BEF, function only, one variable		E01BFF
Interpolated values, evaluate rational <b>interpolant</b> computed by E01RAF, one variable		E01RBF
Interpolated values, evaluate <b>interpolant</b> computed by E01SAF, two variables		E01SBF
Interpolated values, evaluate <b>interpolant</b> computed by E01SEF, two variables		E01SFF
Interpolating functions, polynomial <b>interpolant</b> , data may include derivative values, one variable		E01AEF
Interpolating functions, cubic spline <b>interpolant</b> , one variable		E01BAF
Interpolating functions, rational <b>interpolant</b> , one variable		E01RAF
<b>Interpolated</b> values, Aitken's technique, unequally spaced data,...		E01AAF
<b>Interpolated</b> values, evaluate interpolant computed by E01SAF,...		E01SBF
<b>Interpolated</b> values, evaluate interpolant computed by E01SEF,...		E01SFF
<b>Interpolated</b> values, evaluate rational interpolant computed by...		E01RBF
<b>Interpolated</b> values, Everett's formula, equally spaced data,...		E01ABF
<b>Interpolated</b> values, interpolant computed by E01BEF,...		E01BHF
<b>Interpolated</b> values, interpolant computed by E01BEF,...		E01BGF
<b>Interpolated</b> values, interpolant computed by E01BEF,...		E01BFF
<b>Interpolating</b> functions, cubic spline interpolant, one variable		E01BAF
<b>Interpolating</b> functions, fitting bicubic spline, data on rectangular...		E01DAF
<b>Interpolating</b> functions, method of Renka and Cline, two variables		E01SAF
<b>Interpolating</b> functions, modified Shepard's method, two variables		E01SEF
<b>Interpolating</b> functions, modified Shepard's method, two variables		E01SGF
<b>Interpolating</b> functions, monotonicity-preserving, piecewise cubic...		E01BEF
<b>Interpolating</b> functions, polynomial interpolant, data...		E01AEF
<b>Interpolating</b> functions, rational interpolant, one variable		E01RAF
Least-squares polynomial fit, special data points (including <b>interpolation</b> )		E02AFF
Least-squares curve cubic spline fit (including <b>interpolation</b> )		E02BAF
Second-order ODEs, IVP, <b>interpolation</b> for D02LAF		D02LZF
ODEs, IVP, <b>interpolation</b> for D02M–N routines, $C_1$ interpolant		D02XKF
ODEs, IVP, <b>interpolation</b> for D02M–N routines, natural interpolant		D02MZF
ODEs, IVP, <b>interpolation</b> for D02M–N routines, natural interpolant		D02XJF
ODEs, IVP, <b>interpolation</b> for D02PDF		D02PXF
ODEs, IVP, <b>interpolation</b> for D02QFF or D02QGF		D02QZF
ODEs, general nonlinear boundary value problem, <b>interpolation</b> for D02TKF		D02TYF
PDEs, spatial <b>interpolation</b> with D03PCF, D03PEF, D03PFF, D03PHF,...		D03PZF
PDEs, spatial <b>interpolation</b> with D03PDF or D03PJF		D03PYF

...update, one iteration of Kalman filter, time-invariant, square root covariance filter	G13EBF
...real matrix, form orthonormal basis of right invariant subspace for selected eigenvalues,...	F08QGF
...complex matrix, form orthonormal basis of right invariant subspace for selected eigenvalues,...	F08QUF
Pseudo-inverse and rank of real $m$ by $n$ matrix ( $m \geq n$ )	F01BLF
Inverse distributions	G01F
Eigenvector of generalized real banded eigenproblem by inverse iteration	F02SDF
...eigenvectors of real upper Hessenberg matrix by inverse iteration	F08PKF
...eigenvectors of complex upper Hessenberg matrix by inverse iteration	F08PXF
Selected eigenvectors of real symmetric tridiagonal matrix by inverse iteration, storing eigenvectors in complex array	F08JXF
Selected eigenvectors of real symmetric tridiagonal matrix by inverse iteration, storing eigenvectors in real array	F08JKF
Evaluate inverse Laplace transform as computed by C06LBF	C06LCF
Inverse Laplace transform, Crump's method	C06LAF
Inverse Laplace transform, modified Weeks' method	C06LBF
Inverse of complex Hermitian indefinite matrix,...	F07MWF
Inverse of complex Hermitian indefinite matrix,...	F07PWF
Inverse of complex Hermitian positive-definite matrix,...	F07WVF
Inverse of complex Hermitian positive-definite matrix,...	F07GWF
Inverse of complex matrix, matrix already factorized by F07ARF	F07AWF
Inverse of complex symmetric matrix, matrix already factorized...	F07NWF
Inverse of complex symmetric matrix, matrix already factorized...	F07QWF
Inverse of complex triangular matrix	F07TWF
Inverse of complex triangular matrix, packed storage	F07UWF
Inverse of real matrix, matrix already factorized by F07ADF	F07AJF
Inverse of real symmetric indefinite matrix,...	F07MJF
Inverse of real symmetric indefinite matrix,...	F07PJF
Inverse of real symmetric positive-definite matrix	F01ADF
Inverse of real symmetric positive-definite matrix,...	F07FFJF
Inverse of real symmetric positive-definite matrix,...	F07GJF
Inverse of real symmetric positive-definite matrix...	F01ABF
Inverse of real triangular matrix	F07TJF
Inverse of real triangular matrix, packed storage	F07UJF
Invert a permutation	M01ZAF
Interpret MPSX data file defining IP or LP problem, optimize and print solution	H02BFF
Convert MPSX data file defining IP or LP problem to format required by H02BBF or E04MFF	H02BUF
Print IP or LP solutions with user specified names for rows and columns	H02BVF
...by SIP, five-point two-dimensional molecule, iterate to convergence	D03EBF
...SIP for seven-point three-dimensional molecule, iterate to convergence	D03ECF
...SIP, five-point two-dimensional molecule, one iteration	D03UAF
...SIP, seven-point three-dimensional molecule, one iteration	D03UBF
Eigenvector of generalized real banded eigenproblem by inverse iteration	F02SDF
...eigenvectors of real upper Hessenberg matrix by inverse iteration	F08PKF
...of complex upper Hessenberg matrix by inverse iteration	F08PXF
Combined measurement and time update, one iteration of Kalman filter, time-invariant, square root covariance filter	G13EBF
Combined measurement and time update, one iteration of Kalman filter, time-varying, square root covariance filter	G13EAF
...real symmetric tridiagonal matrix by inverse iteration, storing eigenvectors in complex array	F08JXF
...real symmetric tridiagonal matrix by inverse iteration, storing eigenvectors in real array	F08JKF
Inverse of real symmetric positive-definite matrix using iterative refinement	F01ABF
...equations with multiple right-hand sides using iterative refinement (Black Box)	F04ABF
...equations with multiple right-hand sides using iterative refinement (Black Box)	F04AEF
...in $n$ unknowns, rank = $n$ , $m \geq n$ using iterative refinement (Black Box)	F04AMF
...simultaneous linear equations, one right-hand side using iterative refinement (Black Box)	F04ASF
...simultaneous linear equations, one right-hand side using iterative refinement (Black Box)	F04ATF
...positive-definite simultaneous linear equations using iterative refinement (coefficient matrix already factorized by F03AEF)	F04AFF
Solution of real simultaneous linear equations using iterative refinement (coefficient matrix already factorized by F03AFF)	F04AHF
ODEs, IVP, Adams method, until function of solution is zero,...	D02CJF
ODEs, IVP, Adams method with root-finding (forward communication,...	D02QFF
ODEs, IVP, Adams method with root-finding (reverse communication,...	D02QGF
Explicit ODEs, stiff IVP, banded Jacobian (comprehensive)	D02NCF
Implicit/algebraic ODEs, stiff IVP, banded Jacobian (comprehensive)	D02NHF
ODEs, IVP, BDF method, set-up for D02M-N routines	D02NVF
ODEs, stiff IVP, BDF method, until function of solution is zero,...	D02EJF
ODEs, IVP, Blend method, set-up for D02M-N routines	D02NWF
ODEs, IVP, DASSL method, set-up for D02M-N routines	D02MVF
Second-order ODEs, IVP, diagnostics for D02LAF	D02LYF
ODEs, IVP, diagnostics for D02QFF and D02QGF	D02QXF
ODEs, IVP, error assessment diagnostics for D02PCF and D02PDF	D02PZF
ODEs, IVP, for use with D02M-N routines, banded Jacobian,...	D02NTF
ODEs, IVP, for use with D02M-N routines, full Jacobian,...	D02NSF
ODEs, IVP, for use with D02M-N routines, sparse Jacobian, enquiry routine	D02NRF
ODEs, IVP, for use with D02M-N routines, sparse Jacobian,...	D02NUF
Explicit ODEs, stiff IVP, full Jacobian (comprehensive)	D02NBF
Implicit/algebraic ODEs, stiff IVP, full Jacobian (comprehensive)	D02NGF
ODEs, IVP, integration diagnostics for D02PCF and D02PDF	D02PYF
ODEs, IVP, integrator diagnostics, for use with D02M-N routines	D02NYF
Second-order ODEs, IVP, interpolation for D02LAF	D02LZF
ODEs, IVP, interpolation for D02M-N routines, $C_1$ interpolant	D02XKF
ODEs, IVP, interpolation for D02M-N routines, natural interpolant	D02MZF
ODEs, IVP, interpolation for D02M-N routines, natural interpolant	D02XJF
ODEs, IVP, interpolation for D02PDF	D02PXF
ODEs, IVP, interpolation for D02QFF or D02QGF	D02QZF
ODEs, IVP, resets end of range for D02PDF	D02PWF
Explicit ODEs, stiff IVP (reverse communication, comprehensive)	D02NMF
Implicit/algebraic ODEs, stiff IVP (reverse communication, comprehensive)	D02NNF
ODEs, IVP, root-finding diagnostics for D02QFF and D02QGF	D02QYF
ODEs, IVP, Runge-Kutta method, integration over one step	D02PDF
ODEs, IVP, Runge-Kutta method, integration over range with output	D02PCF
ODEs, IVP, Runge-Kutta method, until function of solution is zero,...	D02BJF
ODEs, IVP, Runge-Kutta-Merson method, until...	D02BGF
ODEs, IVP, Runge-Kutta-Merson method, until...	D02BHF
Second-order ODEs, IVP, Runge-Kutta-Nystrom method	D02LAF
ODEs, IVP, set-up for continuation calls to integrator,...	D02NZF
Second-order ODEs, IVP, set-up for D02LAF	D02LXF
ODEs, IVP, set-up for D02PCF and D02PDF	D02PVF
ODEs, IVP, set-up for D02QFF and D02QGF	D02QWF
Explicit ODEs, stiff IVP, sparse Jacobian (comprehensive)	D02NDF
Implicit/algebraic ODEs, stiff IVP, sparse Jacobian (comprehensive)	D02NJF
ODEs, IVP, sparse Jacobian, linear algebra diagnostics,...	D02NXF
ODEs, IVP, weighted norm of local error estimate for D02M-N routines	D02ZAF
...linear system, RGMRES, CGS or Bi-CGSTAB method, Jacobi or SSOR preconditioner (Black Box)	F11DEF
...system, RGMRES, CGS, Bi-CGSTAB or TFQMR method, Jacobi or SSOR preconditioner (Black Box)	F11DSF
...linear system, conjugate gradient/Lanczos method, Jacobi or SSOR preconditioner (Black Box)	F11JEF
...linear system, conjugate gradient/Lanczos method, Jacobi or SSOR preconditioner (Black Box)	F11JSF
Generate real Jacobi plane rotation	F06BEF
Explicit ODEs, stiff IVP, full Jacobian (comprehensive)	D02NBF
Explicit ODEs, stiff IVP, banded Jacobian (comprehensive)	D02NCF
Explicit ODEs, stiff IVP, sparse Jacobian (comprehensive)	D02NDF
Implicit/algebraic ODEs, stiff IVP, full Jacobian (comprehensive)	D02NGF

Implicit/algebraic ODEs, stiff IVP, banded	<b>Jacobian</b> (comprehensive)	D02NHF
Implicit/algebraic ODEs, stiff IVP, sparse	<b>Jacobian</b> (comprehensive)	D02NHF
ODEs, IVP, for use with D02M–N routines, sparse	<b>Jacobian</b> elliptic functions sn, cn and dn	S21CAF
ODEs, IVP, for use with D02M–N routines, full	<b>Jacobian</b> , enquiry routine	D02NRF
ODEs, IVP, for use with D02M–N routines, banded	<b>Jacobian</b> , linear algebra diagnostics, for use with D02M–N routines	D02NXF
ODEs, IVP, for use with D02M–N routines, sparse	<b>Jacobian</b> , linear algebra set-up	D02NSF
Check user's routine for calculating	<b>Jacobian</b> , linear algebra set-up	D02NTF
	<b>Jacobian</b> , linear algebra set-up	D02NUF
	<b>Jacobian</b> of first derivatives	E04YAF
	<b>K-means</b> cluster analysis	G03EFF
Combined measurement and time update, one iteration of	<b>Kalman</b> filter, time-invariant, square root covariance filter	G13EBF
Combined measurement and time update, one iteration of	<b>Kalman</b> filter, time-varying, square root covariance filter	G13EAF
	Computes <b>Kaplan–Meier</b> (product-limit) estimates of survival probabilities	G12AAF
	Bunch– <b>Kaufman</b> factorization of complex Hermitian indefinite matrix	F07MRF
	Bunch– <b>Kaufman</b> factorization of complex Hermitian indefinite matrix,...	F07PRF
	Bunch– <b>Kaufman</b> factorization of complex symmetric matrix	F07NRF
	Bunch– <b>Kaufman</b> factorization of complex symmetric matrix,...	F07QRF
	Bunch– <b>Kaufman</b> factorization of real symmetric indefinite matrix	F07MDF
	Bunch– <b>Kaufman</b> factorization of real symmetric indefinite matrix,...	F07PDF
General system of first-order PDEs, method of lines,	<b>Keller</b> box discretisation, one space variable	D03PEF
General system of first-order PDEs, coupled DAEs, method of lines,	<b>Keller</b> box discretisation, one space variable	D03PKF
General system of first-order PDEs, coupled DAEs, method of lines,	<b>Keller</b> box discretisation, remeshing, one space variable	D03PRF
	<b>Kelvin</b> function bei $x$	S19ABF
	<b>Kelvin</b> function ber $x$	S19AAF
	<b>Kelvin</b> function kei $x$	S19ADF
	<b>Kelvin</b> function ker $x$	S19ACF
	<b>Kendall's</b> coefficient of concordance	G08DAF
	<b>Kendall/Spearman</b> non-parametric rank correlation coefficients,...	G02BPF
	<b>Kendall/Spearman</b> non-parametric rank correlation coefficients,...	G02BRF
	<b>Kendall/Spearman</b> non-parametric rank correlation coefficients,...	G02BNF
	<b>Kendall/Spearman</b> non-parametric rank correlation coefficients,...	G02BQF
	<b>Kendall/Spearman</b> non-parametric rank correlation coefficients,...	G02BSF
Linear non-singular Fredholm integral equation, second kind, split	<b>kernel</b>	D05AAF
...Fredholm integral equation, second kind, smooth	<b>kernel</b>	D05ABF
Kernel density estimate using Gaussian	<b>kernel</b>	G10BAF
	<b>Kernel</b> density estimate using Gaussian kernel	G10BAF
Least-squares cubic spline curve fit, automatic	<b>knot</b> placement	E02BEF
Least-squares surface fit by bicubic splines with automatic	<b>knot</b> placement, data on rectangular grid	E02DCF
Least-squares surface fit by bicubic splines with automatic	<b>knot</b> placement, scattered data	E02DDF
Computes probabilities for the one-sample	<b>Kolmogorov–Smirnov</b> distribution	G01EYF
Computes probabilities for the two-sample	<b>Kolmogorov–Smirnov</b> distribution	G01EZF
Performs the two-sample	<b>Kolmogorov–Smirnov</b> test	G08CDF
Performs the one-sample	<b>Kolmogorov–Smirnov</b> test for a user-supplied distribution	G08CCF
Performs the one-sample	<b>Kolmogorov–Smirnov</b> test for standard distributions	G08CBF
	<b>Korobov</b> optimal coefficients for use in D01GCF or D01GDF,...	D01GYF
	<b>Korobov</b> optimal coefficients for use in D01GCF or D01GDF,...	D01GZF
	<b>Kruskal–Wallis</b> one-way analysis of variance on $k$ samples...	G08AFF
Mean, variance, skewness,	<b>kurtosis</b> , etc., one variable, from frequency table	G01ADF
Mean, variance, skewness,	<b>kurtosis</b> , etc., one variable, from raw data	G01AAF
Mean, variance, skewness,	<b>kurtosis</b> , etc., two variables, from raw data	G01ABF
ODEs, IVP, Runge– <b>Kutta</b> method, integration over one step		D02PDF
ODEs, IVP, Runge– <b>Kutta</b> method, integration over range with output		D02PCF
ODEs, IVP, Runge– <b>Kutta</b> method, until function of solution is zero,...		D02BJF
ODEs, IVP, Runge– <b>Kutta–Merson</b> method, until a component attains given value...		D02BGF
ODEs, IVP, Runge– <b>Kutta–Merson</b> method, until function of solution is zero...		D02BHF
Second-order	<b>Kutta–Nyström</b> method	D02LAF
Multivariate time series, sample partial	<b>lag</b> correlation matrices, $\chi^2$ statistics and significance levels	G13DNF
...using rectangular, Bartlett, Tukey or Parzen	<b>lag</b> window	G13CAF
...using rectangular, Bartlett, Tukey or Parzen	<b>lag</b> window	G13CCF
All zeros of complex polynomial, modified	<b>Laguerre</b> method	C02AFF
All zeros of real polynomial, modified	<b>Laguerre</b> method	C02AGF
...sparse symmetric linear system, conjugate gradient/ <b>Lanczos</b> method, Jacobi or SSOR preconditioner (Black Box)		F11JEF
...sparse Hermitian linear system, conjugate gradient/ <b>Lanczos</b> method, Jacobi or SSOR preconditioner (Black Box)		F11JSF
...sparse symmetric linear system, conjugate gradient/ <b>Lanczos</b> method, preconditioner computed by F11JAF (Black Box)		F11JCF
...sparse Hermitian linear system, conjugate gradient/ <b>Lanczos</b> method, preconditioner computed by F11JNF (Black Box)		F11JQF
	<b>LAPACK</b>	F07/F08
Evaluate inverse	<b>Laplace</b> transform as computed by C06LBF	C06LCF
Inverse	<b>Laplace</b> transform, Crump's method	C06LAF
Inverse	<b>Laplace</b> transform, modified Weeks' method	C06LBF
Elliptic PDE,	<b>Laplace's</b> equation, two-dimensional arbitrary domain	D03EAF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex band matrix	F06UBF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex general matrix	F06UAF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex Hermitian band matrix	F06UEF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex Hermitian matrix	F06UCF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex Hermitian matrix, packed storage	F06UDF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex Hessenberg matrix	F06UMF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex symmetric band matrix	F06UHF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex symmetric matrix	F06UFF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex symmetric matrix, packed storage	F06UGF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex trapezoidal/triangular matrix	F06UJF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex triangular band matrix	F06ULF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, complex triangular matrix, packed storage	F06UKF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real band matrix	F06RBF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real general matrix	F06RAF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real Hessenberg matrix	F06RMF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real symmetric band matrix	F06REF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real symmetric matrix	F06RCF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real symmetric matrix, packed storage	F06RDF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real trapezoidal/triangular matrix	F06RJF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real triangular band matrix	F06RLF
1-norm, $\infty$ -norm, Frobenius norm,	<b>largest</b> absolute element, real triangular matrix, packed storage	F06RKF
Index, real vector element with	<b>largest</b> absolute value	F06JLF
Index, complex vector element with	<b>largest</b> absolute value	F06JMF
Elements of real vector with	<b>largest</b> and smallest absolute value	F06FLF
The	<b>largest</b> permissible argument for sin and cos	X02AHF
The	<b>largest</b> positive model number	X02ALF

	The largest representable integer	X02BBF
	Contingency table, latent variable model for binary data	G11SAF
	$LDL^T$ factorization of real symmetric positive-definite...	F01MCF
	Constructs a stem and leaf plot	G01ARF
n <sup>th</sup> -order linear ODEs, boundary value problem, collocation and	least-squares	D02TGF
Real general Gauss–Markov linear model (including weighted	least-squares)	F04JLF
Complex general Gauss–Markov linear model (including weighted	least-squares)	F04KLF
	Least-squares cubic spline curve fit, automatic knot placement	E02BEF
	Least-squares curve cubic spline fit (including interpolation)	E02BAF
	Least-squares curve fit, by polynomials, arbitrary data points	E02ADF
	Least-squares (if rank = $n$ ) or minimal least-squares...	F04JGF
Least-squares (if rank = $n$ ) or minimal	least-squares (if rank < $n$ ) solution of $m$ real equations...	F04JGF
	Least-squares polynomial fit, special data points...	E02AFF
	Least-squares polynomial fit, values and derivatives may be...	E02AGF
Equality-constrained real linear	least-squares problem	F04JMF
Equality-constrained complex linear	least-squares problem	F04KMF
Convex QP problem or linearly-constrained linear	least-squares problem (dense)	E04NCF
	Sparse linear least-squares problem, $m$ real equations in $n$ unknowns	F04QAF
	Covariance matrix for nonlinear least-squares problem (unconstrained)	E04YCF
	Covariance matrix for linear least-squares problems, $m$ real equations in $n$ unknowns	F04YAF
ODEs, boundary value problem, collocation and	least-squares, single $n$ th-order linear equation	D02JAF
	Least-squares solution of $m$ real equations in $n$ unknowns,...	F04AMF
	Minimal least-squares solution of $m$ real equations in $n$ unknowns,...	F04JAF
	Minimal least-squares solution of $m$ real equations in $n$ unknowns,...	F04JDF
	Least-squares surface fit, bicubic splines	E02DAF
	Least-squares surface fit by bicubic splines with automatic...	E02DCF
	Least-squares surface fit by bicubic splines with automatic...	E02DDF
	Least-squares surface fit by polynomials, data on lines	E02CAF
ODEs, boundary value problem, collocation and	least-squares, system of first-order linear equations	D02JBF
...matrices, $\chi^2$ statistics and significance levels		G13DNF
	Computes maximum likelihood estimates for parameters of the Normal distribution...	G07BBF
	Computes maximum likelihood estimates for parameters of the Weibull distribution	G07BEF
	Computes maximum likelihood estimates of the parameters of a factor analysis model,...	G03CAF
	Computes Kaplan–Meier (product-limit) estimates of survival probabilities	G12AAF
	ODEs, IVP, sparse Jacobian, linear algebra diagnostics, for use with D02M–N routines	D02NXF
ODEs, IVP, for use with D02M–N routines, full Jacobian,	linear algebra set-up	D02NSF
ODEs, IVP, for use with D02M–N routines, banded Jacobian,	linear algebra set-up	D02NTF
ODEs, IVP, for use with D02M–N routines, sparse Jacobian,	linear algebra set-up	D02NUF
	Basic Linear Algebra Subprograms	F06
	Computes lower tail probability for a linear combination of (central) $\chi^2$ variables	G01JDF
	Computes probability for a positive linear combination of $\chi^2$ variables	G01JCF
...collocation and least-squares, single $n$ th-order	linear equation	D02JAF
...collocation and least-squares, system of first-order	linear equations	D02JBF
	Solution of real sparse simultaneous linear equations (coefficient matrix already factorized)	F04AXF
	Solution of real tridiagonal simultaneous linear equations (coefficient matrix already factorized by F01LEF)	F04LEF
	Solution of real almost block diagonal simultaneous linear equations (coefficient matrix already factorized by F01LHF)	F04LHF
...positive-definite variable-bandwidth simultaneous	linear equations (coefficient matrix already factorized by F01MCF)	F04MCF
Solution of real symmetric positive-definite simultaneous	linear equations (coefficient matrix already factorized by F03AEF)	F04AGF
	Solution of real simultaneous linear equations (coefficient matrix already factorized by F03AFF)	F04AJF
	Refined solution with error bounds of real system of linear equations, multiple right-hand sides	F07AHF
	Refined solution with error bounds of complex system of linear equations, multiple right-hand sides	F07AVF
	Refined solution with error bounds of real band system of linear equations, multiple right-hand sides	F07BHF
Refined solution with error bounds of complex band system of	linear equations, multiple right-hand sides	F07BVF
...of real symmetric positive-definite system of	linear equations, multiple right-hand sides	F07FFH
...complex Hermitian positive-definite system of	linear equations, multiple right-hand sides	F07FVF
...real symmetric positive-definite band system of	linear equations, multiple right-hand sides	F07HHF
...complex Hermitian positive-definite band system of	linear equations, multiple right-hand sides	F07HVF
...bounds of real symmetric indefinite system of	linear equations, multiple right-hand sides	F07MHF
...bounds of complex Hermitian indefinite system of	linear equations, multiple right-hand sides	F07MVF
Refined solution with error bounds of complex symmetric system of	linear equations, multiple right-hand sides	F07NVF
	Solution of real triangular system of linear equations, multiple right-hand sides	F07TEF
Error bounds for solution of real triangular system of	linear equations, multiple right-hand sides	F07THF
	Solution of complex triangular system of linear equations, multiple right-hand sides	F07TSF
Error bounds for solution of complex triangular system of	linear equations, multiple right-hand sides	F07TVF
	Solution of real band triangular system of linear equations, multiple right-hand sides	F07VEF
Error bounds for solution of real band triangular system of	linear equations, multiple right-hand sides	F07VHF
	Solution of complex band triangular system of linear equations, multiple right-hand sides	F07VSF
Error bounds for solution of complex band triangular system of	linear equations, multiple right-hand sides	F07VVF
	Solution of real system of linear equations, multiple right-hand sides,...	F07AEF
	Solution of complex system of linear equations, multiple right-hand sides,...	F07ASF
	Solution of real band system of linear equations, multiple right-hand sides,...	F07BEF
	Solution of complex band system of linear equations, multiple right-hand sides,...	F07BSF
	Solution of real symmetric positive-definite system of linear equations, multiple right-hand sides,...	F07FEF
Solution of complex Hermitian positive-definite system of	linear equations, multiple right-hand sides,...	F07FSF
Solution of real symmetric positive-definite system of	linear equations, multiple right-hand sides,...	F07GEF
Solution of complex Hermitian positive-definite system of	linear equations, multiple right-hand sides,...	F07GSF
Solution of real symmetric positive-definite band system of	linear equations, multiple right-hand sides,...	F07HEF
Solution of complex Hermitian positive-definite band system of	linear equations, multiple right-hand sides,...	F07HSF
	Solution of real symmetric indefinite system of linear equations, multiple right-hand sides,...	F07MEF
Solution of complex Hermitian indefinite system of	linear equations, multiple right-hand sides,...	F07MSF
	Solution of complex symmetric system of linear equations, multiple right-hand sides,...	F07NSF
	Solution of real symmetric indefinite system of linear equations, multiple right-hand sides,...	F07PEF
Solution of complex Hermitian indefinite system of	linear equations, multiple right-hand sides,...	F07PSF
	Solution of complex symmetric system of linear equations, multiple right-hand sides,...	F07QSF
...of real symmetric positive-definite system of	linear equations, multiple right-hand sides, packed storage	F07GHF
...complex Hermitian positive-definite system of	linear equations, multiple right-hand sides, packed storage	F07GVF
...bounds of real symmetric indefinite system of	linear equations, multiple right-hand sides, packed storage	F07PHF
...bounds of complex Hermitian indefinite system of	linear equations, multiple right-hand sides, packed storage	F07PVF
Refined solution with error bounds of complex symmetric system of	linear equations, multiple right-hand sides, packed storage	F07QVF
	Solution of real triangular system of linear equations, multiple right-hand sides, packed storage	F07UEF
Error bounds for solution of real triangular system of	linear equations, multiple right-hand sides, packed storage	F07UHF
	Solution of complex triangular system of linear equations, multiple right-hand sides, packed storage	F07USF
Error bounds for solution of complex triangular system of	linear equations, multiple right-hand sides, packed storage	F07UVF
	Solution of real simultaneous linear equations, one right-hand side (Black Box)	F04ARF
	Solution of real tridiagonal simultaneous linear equations, one right-hand side (Black Box)	F04EAF
...symmetric positive-definite tridiagonal simultaneous	linear equations, one right-hand side (Black Box)	F04FAF
Solution of real symmetric positive-definite simultaneous	linear equations, one right-hand side using iterative...	F04ASF
	Solution of real simultaneous linear equations, one right-hand side using iterative...	F04ATF
Solution of real symmetric positive-definite simultaneous	linear equations using iterative refinement (coefficient matrix...	F04AFF
	Solution of real simultaneous linear equations using iterative refinement (coefficient matrix...	F04AHF
	Solution of real simultaneous linear equations with multiple right-hand sides (Black Box)	F04AAF
Solution of real symmetric positive-definite banded simultaneous	linear equations with multiple right-hand sides (Black Box)	F04ACF
	Solution of complex simultaneous linear equations with multiple right-hand sides (Black Box)	F04ADF
Solution of real symmetric positive-definite simultaneous	linear equations with multiple right-hand sides using...	F04ABF
	Solution of real simultaneous linear equations with multiple right-hand sides using...	F04AEF
	$L_1$ -approximation by general linear function	E02GAF
	$L_\infty$ -approximation by general linear function	E02GCF

$L_1$ -approximation by general linear function subject to	<b>linear</b> function subject to linear inequality constraints	E02GBF
Equality-constrained real	<b>linear</b> inequality constraints	E02GBF
Equality-constrained complex	<b>linear</b> least-squares problem	F04JMF
Convex QP problem or linearly-constrained	<b>linear</b> least-squares problem	F04KMF
	<b>linear</b> least-squares problem (dense)	E04NCF
	Sparse <b>linear</b> least-squares problem, $m$ real equations in $n$ unknowns	F04QAF
	Covariance matrix for <b>linear</b> least-squares problems, $m$ real equations in $n$ unknowns	F04YAF
Computes estimable function of a generalized	<b>linear</b> model and its standard error	G02GNF
Estimates and standard errors of parameters of a general	<b>linear</b> model for given constraints	G02GKF
Real general Gauss–Markov	<b>linear</b> model (including weighted least-squares)	F04JLF
Complex general Gauss–Markov	<b>linear</b> model (including weighted least-squares)	F04KLF
	Fits a generalized <b>linear</b> model with binomial errors	G02GBF
	Fits a generalized <b>linear</b> model with gamma errors	G02GDF
	Fits a generalized <b>linear</b> model with Normal errors	G02GAF
	Fits a generalized <b>linear</b> model with Poisson errors	G02GCF
	<b>Linear</b> non-singular Fredholm integral equation, second kind,...	D05ABF
	<b>Linear</b> non-singular Fredholm integral equation, second kind,...	D05AAF
	$n$ th-order <b>linear</b> ODEs, boundary value problem, collocation and least-squares	D02TGF
	Estimates of <b>linear</b> parameters and general linear regression model...	G02DDF
...difference technique with deferred correction, general	<b>linear</b> problem	D02GBF
	Multiple <b>linear</b> regression, from correlation coefficients, with constant term	G02CGF
	Multiple <b>linear</b> regression, from correlation-like coefficients, without constant...	G02CHF
	Fits a general (multiple) <b>linear</b> regression model	G02DAF
Add/delete an observation to/from a general	<b>linear</b> regression model	G02DCF
Add a new variable to a general	<b>linear</b> regression model	G02DEF
Delete a variable from a general	<b>linear</b> regression model	G02DFF
Computes estimable function of a general	<b>linear</b> regression model and its standard error	G02DNF
	Fits a <b>linear</b> regression model by forward selection	G02EEF
Estimates and standard errors of parameters of a general	<b>linear</b> regression model for given constraints	G02DKF
	Fits a general <b>linear</b> regression model for new dependent variable	G02DGF
Estimates of linear parameters and general	<b>linear</b> regression model from updated model	G02DDF
Service routines for multiple	<b>linear</b> regression, re-order elements of vectors and matrices	G02DDF
Service routines for multiple	<b>linear</b> regression, select elements from vectors and matrices	G02CEF
	Simple <b>linear</b> regression with constant term, missing values	G02CCF
	Simple <b>linear</b> regression with constant term, no missing values	G02CAF
	Simple <b>linear</b> regression without constant term, missing values	G02CDF
	Simple <b>linear</b> regression without constant term, no missing values	G02CBF
Computes residual sums of squares for all possible	<b>linear</b> regressions for a set of independent variables	G02EAF
Solution of complex sparse non-Hermitian	<b>linear</b> system, RGMRES, CGS, Bi-CGSTAB or TFQMR method,...	F11DSF
Solution of real sparse nonsymmetric	<b>linear</b> system, RGMRES, CGS or Bi-CGSTAB method,...	F11DEF
Solution of real sparse symmetric	<b>linear</b> system, conjugate gradient/Lanczos method,...	F11JEF
Solution of complex sparse Hermitian	<b>linear</b> system, conjugate gradient/Lanczos method,...	F11JSF
Solution of real sparse symmetric	<b>linear</b> system, conjugate gradient/Lanczos method,...	F11JCF
Solution of complex sparse Hermitian	<b>linear</b> system, conjugate gradient/Lanczos method,...	F11JQF
	Solution of <b>linear</b> system involving incomplete Cholesky preconditioning...	F11JBF
	Solution of complex <b>linear</b> system involving incomplete Cholesky preconditioning...	F11JPF
	Solution of <b>linear</b> system involving incomplete $LU$ preconditioning...	F11DBF
	Solution of complex <b>linear</b> system involving incomplete $LU$ preconditioning...	F11DPF
	Solution of <b>linear</b> system involving preconditioning matrix generated by...	F11JRF
	Solution of <b>linear</b> system involving preconditioning matrix generated by...	F11DRF
	Solution of <b>linear</b> system involving pre-conditioning matrix generated by...	F11DDF
	Solution of <b>linear</b> system involving preconditioning matrix generated by...	F11JDF
Solution of complex sparse non-Hermitian	<b>linear</b> system, RGMRES, CGS, Bi-CGSTAB or TFQMR method,...	F11DQF
Solution of real sparse nonsymmetric	<b>linear</b> system, RGMRES, CGS or Bi-CGSTAB method,...	F11DCF
Real sparse nonsymmetric	<b>linear</b> systems, diagnostic for F11BBF	F11BCF
Complex sparse non-Hermitian	<b>linear</b> systems, diagnostic for F11BEF	F11BFF
Real sparse symmetric	<b>linear</b> systems, diagnostic for F11BSF	F11BTF
Real sparse nonsymmetric	<b>linear</b> systems, diagnostic for F11BGF	F11GCF
Complex sparse non-Hermitian	<b>linear</b> systems, incomplete $LU$ factorization	F11DAF
Real sparse symmetric	<b>linear</b> systems, incomplete $LU$ factorization	F11DNF
Real sparse nonsymmetric	<b>linear</b> systems, pre-conditioned conjugate gradient or Lanczos	F11GBF
Complex sparse non-Hermitian	<b>linear</b> systems, preconditioned RGMRES, CGS, Bi-CGSTAB...	F11BEF
Real sparse nonsymmetric	<b>linear</b> systems, preconditioned RGMRES, CGS, Bi-CGSTAB...	F11BSF
Real sparse symmetric	<b>linear</b> systems, preconditioned RGMRES, CGS or Bi-CGSTAB	F11BBF
Real sparse nonsymmetric	<b>linear</b> systems, set-up for F11BBF	F11BAF
Complex sparse non-Hermitian	<b>linear</b> systems, set-up for F11BEF	F11BDF
Real sparse symmetric	<b>linear</b> systems, set-up for F11BSF	F11BRF
Real sparse nonsymmetric	<b>linear</b> systems, set-up for F11BGF	F11GAF
Convex QP problem or linearly-constrained	<b>linear</b> least-squares problem (dense)	E04NCF
	<b>Lineprinter</b> histogram of one variable	G01AJF
	<b>Lineprinter</b> scatterplot of one variable against Normal scores	G01AHF
	<b>Lineprinter</b> scatterplot of two variables	G01AGF
Least-squares surface fit by polynomials, data on	<b>lines</b>	E02CAF
General system of parabolic PDEs, method of	<b>lines</b> , Chebyshev $C^0$ collocation, one space variable	D03PDF
General system of parabolic PDEs, method of	<b>lines</b> , Chebyshev $C^0$ collocation, one space variable	D03PJF
General system of parabolic PDEs, method of	<b>lines</b> , finite differences, one space variable	D03PCF
General system of parabolic PDEs, method of	<b>lines</b> , finite differences, one space variable	D03PHF
General system of parabolic PDEs, method of	<b>lines</b> , finite differences, remeshing, one space variable	D03PPF
General system of second-order PDEs, method of	<b>lines</b> , finite differences, remeshing, two space variables,...	D03RAF
General system of second-order PDEs, method of	<b>lines</b> , finite differences, remeshing, two space variables,...	D03RBF
General system of first-order PDEs, method of	<b>lines</b> , Keller box discretisation, one space variable	D03PEF
General system of first-order PDEs, method of	<b>lines</b> , Keller box discretisation, one space variable	D03PKF
General system of first-order PDEs, method of	<b>lines</b> , Keller box discretisation, remeshing, one space variable	D03PRF
...source terms in conservative form, method of	<b>lines</b> , upwind scheme using numerical flux function based on...	D03PFF
...in conservative form, coupled DAEs, method of	<b>lines</b> , upwind scheme using numerical flux function based on...	D03PLF
...in conservative form, coupled DAEs, method of	<b>lines</b> , upwind scheme using numerical flux function based on...	D03PSF
Generate real elementary reflection,	<b>LINPACK</b> style	F06FSF
Apply real elementary reflection,	<b>LINPACK</b> style	F06FUF
	Second-order Sturm–Liouville problem, regular system, finite range, eigenvalue only	D02KAF
	Second-order Sturm–Liouville problem, regular/singular system, finite/infinite range,...	D02KEF
	Second-order Sturm–Liouville problem, regular/singular system, finite/infinite range,...	D02KDF
Computes orthogonal rotations for	<b>loading</b> matrix, generalized orthomax criterion	G03BAF
...parameters of a factor analysis model, factor	<b>loadings</b> , communalities and residual correlations	G03CAF
ODEs, IVP, weighted norm of	<b>local</b> error estimate for D02M–N routines	D02ZAF
Robust estimation, $M$ -estimates for	<b>location</b> and scale parameters, standard weight functions	G07DBF
Robust estimation, $M$ -estimates for	<b>location</b> and scale parameters, user-defined weight functions	G07DCF
	<b>Location</b> tests	G08
	<b>Log</b> Gamma function	S14ABF
...function with end-point singularities of algebraico-	<b>logarithmic</b> type	D01APF
Pseudo-random real numbers, <b>logistic</b> distribution		G05DCF
Pseudo-random real numbers, <b>log-normal</b> distribution		G05DEF

Computes upper and lower tail probabilities and probability density function for...	G01EEF
Computes lower tail probability for a linear combination of (central) $\chi^2$ variables	G01JDF
Integer LP or QP problem (sparse)	E04NKF
Integer LP or QP problem (sparse)	H02CEF
Converts MPSX data file defining LP or QP problem to format required by E04NKF	E04MZF
Integer LP problem (dense)	E04MFF
Integer LP problem (dense)	H02BBF
Interpret MPSX data file defining IP or LP problem, optimize and print solution	H02BFF
Convert MPSX data file defining IP or LP problem to format required by H02BBF or E04MFF	H02BUF
Print IP or LP solutions with user specified names for rows and columns	H02BVF
Form all or part of orthogonal $Q$ from $LQ$ factorization determined by F08AHF	F08AJF
Form all or part of unitary $Q$ from $LQ$ factorization determined by F08AVF	F08AWF
$LQ$ factorization of complex general rectangular matrix	F08AVF
$LQ$ factorization of real general rectangular matrix	F08AHF
Real sparse nonsymmetric linear systems, incomplete	$LU$ factorization
Complex sparse non-Hermitian linear systems, incomplete	$LU$ factorization
	$LU$ factorization and determinant of real matrix
	$LU$ factorization of complex $m$ by $n$ band matrix
	$LU$ factorization of complex $m$ by $n$ matrix
	$LU$ factorization of real almost block diagonal matrix
	$LU$ factorization of real $m$ by $n$ band matrix
	$LU$ factorization of real $m$ by $n$ matrix
	$LU$ factorization of real sparse matrix
	$LU$ factorization of real sparse matrix with known sparsity pattern
	$LU$ factorization of real tridiagonal matrix
Solution of linear system involving incomplete	$LU$ preconditioning matrix generated by F11DAF
Solution of complex linear system involving incomplete	$LU$ preconditioning matrix generated by F11DNF
	Machine Constants
	X02
The machine precision	X02AJF
Computes Mahalanobis squared distances for group or pooled...	G03DBF
Computes the exact probabilities for the Mann-Whitney $U$ statistic, no ties in pooled sample	G08AJF
Computes the exact probabilities for the Mann-Whitney $U$ statistic, ties in pooled sample	G08AKF
Performs the Mann-Whitney $U$ test on two independent samples	G08AHF
Computes marginal tables for multiway table computed by G11BAF or G11BBF	G11BCF
Real general Gauss-Markov linear model (including weighted least-squares)	F04JLF
Complex general Gauss-Markov linear model (including weighted least-squares)	F04KLF
Performs the Wilcoxon one-sample (matched pairs) signed rank test	G08AGF
Friedman two-way analysis of variance on $k$ matched samples	G08AEF
ODEs, boundary value problem, shooting and	matching, boundary values to be determined
ODEs, boundary value problem, shooting and	matching, general parameters to be determined
...shooting and matching technique, allowing interior	matching point, general parameters to be determined
ODEs, boundary value problem, shooting and	matching technique, allowing interior matching point,...
ODEs, boundary value problem, shooting and	matching technique, subject to extra algebraic equations,...
	Mathematical Constants
	X01
	Maximization
	E04/H02
Computes maximum likelihood estimates for parameters of the Normal...	G07BBF
Computes maximum likelihood estimates for parameters of the Weibull...	G07BEF
Computes maximum likelihood estimates of the parameters of a factor...	G03CAF
The maximum number of decimal digits that can be represented	X02BEF
Computes a trimmed and winsorized mean of a single sample with estimates of their variance	G07DDF
Computes quantities needed for range-mean or standard deviation-mean plot	G13AUF
Computes quantities needed for range-mean or standard deviation-mean plot	G13AUF
	Mean, variance, skewness, kurtosis, etc, one variable,...
	Mean, variance, skewness, kurtosis, etc, one variable, from raw data
	Mean, variance, skewness, kurtosis, etc, two variables, from raw data
Computes sum of squares for contrast between means	G04DAF
Analysis of variance, general row and column design, treatment means and standard errors	G04BCF
...block or completely randomized design, treatment means and standard errors	G04BBF
Analysis of variance, complete factorial design, treatment means and standard errors	G04CAF
Computes $t$ -test statistic for a difference in means between two Normal populations, confidence interval	G07CAF
$K$ -means cluster analysis	G03EFF
Computes confidence intervals for differences between means computed by G04BBF or G04BCF	G04DBF
Combined measurement and time update, one iteration of Kalman filter,...	G13EBF
Combined measurement and time update, one iteration of Kalman filter,...	G13EAF
Robust estimation, median, median absolute deviation, robust standard deviation	G07DAF
Computes a five-point summary (median, hinges and extremes)	G01ALF
Robust estimation, median, median absolute deviation, robust standard deviation	G07DAF
Compute smoothed data sequence using running median smoothers	G10CAF
Median test on two samples of unequal size	G08ACF
Computes Kaplan-Meier (product-limit) estimates of survival probabilities	G12AAF
ODEs, IVP, Runge-Kutta-Merson method, until a component attains given value (simple driver)	D02BGF
ODEs, IVP, Runge-Kutta-Merson method, until function of solution is zero (simple driver)	D02BHF
Evaluation of fitted bicubic spline at a mesh of points	E02DFF
Performs non-metric (ordinal) multidimensional scaling	G03FCF
Performs principal co-ordinate analysis, classical metric scaling	G03FAF
...integration of function defined by data values, Gill-Miller method	D01GAF
Computes reciprocal of Mills' Ratio	G01MBF
Least-squares (if rank = $n$ ) or minimal least-squares (if rank < $n$ ) solution of $m$ real equations...	F04JGF
Minimal least-squares solution of $m$ real equations in $n$ unknowns,...	F04JAF
Minimal least-squares solution of $m$ real equations in $n$ unknowns,...	F04JDF
Minimax curve fit by polynomials	E02ACF
	Minimization
	E04/H02
Minimum, function of one variable, using first derivative	E04BBF
Minimum, function of one variable using function values only	E04ABF
Minimum, function of several variables, modified Newton algorithm,...	E04LBF
Minimum, function of several variables, modified Newton algorithm,...	E04LYF
Minimum, function of several variables, modified Newton algorithm,...	E04KDF
Minimum, function of several variables, modified Newton algorithm,...	E04KZF
Minimum, function of several variables, quasi-Newton algorithm,...	E04KYF
Minimum, function of several variables, quasi-Newton algorithm,...	E04JYF

	Minimum, function of several variables, sequential QP method,...	E04UCF
	Minimum, function of several variables, sequential QP method,...	E04UFF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04GDF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04GZF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04FCF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04FYF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04HEF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04HYF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04GBF
Unconstrained	minimum of a sum of squares, combined Gauss–Newton and...	E04GYF
	Minimum of a sum of squares, nonlinear constraints,...	E04UNF
Unconstrained	minimum, pre-conditioned conjugate gradient algorithm,...	E04DGF
Unconstrained	minimum, simplex algorithm, function of several variables using...	E04CCF
	Computes probability for von Mises distribution	G01ERF
	Generates a vector of pseudo-random variates from von Mises distribution	G05FSF
Pearson product-moment correlation coefficients, all variables, no	missing values	G02BAF
...coefficients, all variables, casewise treatment of	missing values	G02BBF
...coefficients, all variables, pairwise treatment of	missing values	G02BCF
Correlation-like coefficients (about zero), all variables, no	missing values	G02BDF
...(about zero), all variables, casewise treatment of	missing values	G02BEF
...(about zero), all variables, pairwise treatment of	missing values	G02BFF
...correlation coefficients, subset of variables, no	missing values	G02BGF
...coefficients, subset of variables, casewise treatment of	missing values	G02BHF
...coefficients, subset of variables, pairwise treatment of	missing values	G02BJF
Correlation-like coefficients (about zero), subset of variables, no	missing values	G02BKF
...zero), subset of variables, casewise treatment of	missing values	G02BLF
...zero), subset of variables, pairwise treatment of	missing values	G02BMF
...correlation coefficients, pairwise treatment of	missing values	G02BSF
Simple linear regression with constant term, no	missing values	G02CAF
Simple linear regression without constant term, no	missing values	G02CBF
Simple linear regression with constant term,	missing values	G02CCF
Simple linear regression without constant term,	missing values	G02CDF
Kendall/Spearman non-parametric rank correlation coefficients, no	missing values, overwriting input data	G02BNF
...correlation coefficients, casewise treatment of	missing values, overwriting input data	G02BPF
Kendall/Spearman non-parametric rank correlation coefficients, no	missing values, preserving input data	G02BQF
...correlation coefficients, casewise treatment of	missing values, preserving input data	G02BRF
	Fits a general (multiple) linear regression model	G02DAF
Add/delete an observation to/from a general linear regression	model	G02DCF
...general linear regression model from updated	model	G02DDF
Add a new variable to a general linear regression	model	G02DEF
Delete a variable from a general linear regression	model	G02DFE
Set up reference vector for univariate ARMA time series	model	G05EGF
Generate next term from reference vector for ARMA time series	model	G05EWF
Generates a realisation of a multivariate time series from a VARMA	model	G05HDF
	Fits Cox's proportional hazard model	G12BAF
Univariate time series, preliminary estimation, seasonal ARIMA	model	G13ADF
...forecasts, from fully specified seasonal ARIMA	model	G13AJF
Multivariate time series, filtering (pre-whitening) by an ARIMA	model	G13BAF
Multivariate time series, filtering by a transfer function	model	G13BBF
Multivariate time series, preliminary estimation of transfer function	model	G13BDF
Multivariate time series, estimation of multi-input	model	G13BEF
...update state set for forecasting from multi-input	model	G13BGF
Multivariate time series, forecasting from state set of multi-input	model	G13BHF
...and forecasts from fully specified multi-input	model	G13BJF
Multivariate time series, estimation of VARMA	model	G13DCF
Computes estimable function of a general linear regression	model and its standard error	G02DNF
Computes estimable function of a generalized linear	model and its standard error	G02GNF
	Fits a linear regression model by forward selection	G02EEF
Univariate time series, estimation, seasonal ARIMA	model (comprehensive)	G13AEF
Univariate time series, estimation, seasonal ARIMA	model (easy-to-use)	G13AFE
...estimates of the parameters of a factor analysis	model, factor loadings, communalities and residual correlations	G03CAF
	Contingency table, latent variable model for binary data	G11SAF
Creates the risk sets associated with the Cox proportional hazards	model for fixed covariates	G12ZAF
...of parameters of a general linear regression	model for given constraints	G02DKF
Estimates and standard errors of parameters of a general linear	model for given constraints	G02GKF
	Fits a general linear regression model for new dependent variable	G02DGF
Estimates of linear parameters and general linear regression	model from updated model	G02DDF
	Real general Gauss–Markov linear model (including weighted least-squares)	F04JLF
	Complex general Gauss–Markov linear model (including weighted least-squares)	F04KLF
	The smallest positive model number	X02AKF
	The largest positive model number	X02ALF
	The floating-point model parameter, $b$	X02BHF
	The floating-point model parameter $e_{\max}$	X02BLF
	The floating-point model parameter $e_{\min}$	X02BKF
	The floating-point model parameter, $p$	X02BJF
	The floating-point model parameter ROUNDS	X02DJF
	Fits a generalized linear model with binomial errors	G02GBF
	Fits a generalized linear model with gamma errors	G02GBF
	Fits a generalized linear model with Normal errors	G02GDF
	Fits a generalized linear model with Poisson errors	G02GCF
	Modified Bessel function $e^{- x }I_0(x)$	S18CEF
	Modified Bessel function $e^{- x }I_1(x)$	S18CFF
	Modified Bessel function $e^xK_0(x)$	S18CCF
	Modified Bessel function $e^xK_1(x)$	S18CDF
	Modified Bessel function $I_0(x)$	S18AEF
	Modified Bessel function $I_1(x)$	S18AFF
	Modified Bessel function $K_0(x)$	S18ACF
	Modified Bessel function $K_1(x)$	S18ADF
	Modified Bessel functions $I_{\nu+a}(z)$ , real $a \geq 0, \dots$	S18DEF
	Modified Bessel functions $K_{\nu+a}(z)$ , real $a \geq 0, \dots$	S18DCF
	All zeros of complex polynomial, modified Laguerre method	C02AFF
	All zeros of real polynomial, modified Laguerre method	C02AGF
	Minimum, function of several variables, modified Newton algorithm, simple bounds, using first and...	E04LBF
	Minimum, function of several variables, modified Newton algorithm, simple bounds, using first and...	E04LYF
	Minimum, function of several variables, modified Newton algorithm, simple bounds, using first derivatives...	E04KDF
	Minimum, function of several variables, modified Newton algorithm, simple bounds, using first derivatives...	E04KZF
...a sum of squares, combined Gauss–Newton and	modified Newton algorithm using first derivatives (comprehensive)	E04GDF
...a sum of squares, combined Gauss–Newton and	modified Newton algorithm using first derivatives (easy-to-use)	E04GZF
...a sum of squares, combined Gauss–Newton and	modified Newton algorithm using function values only (comprehensive)	E04FCF
...a sum of squares, combined Gauss–Newton and	modified Newton algorithm using function values only (easy-to-use)	E04FYF
...a sum of squares, combined Gauss–Newton and	modified Newton algorithm, using second derivatives (comprehensive)	E04HEF
...a sum of squares, combined Gauss–Newton and	modified Newton algorithm, using second derivatives (easy-to-use)	E04HYF
	Interpolating functions, modified Shepard's method, two variables	E01SEF
	Interpolating functions, modified Shepard's method, two variables	E01SGF
	Inverse Laplace transform, modified Weeks' method	C06LBF
	Modulus of complex number	A02ABF
...equations by SIP, five-point two-dimensional	molecule, iterate to convergence	D03EBF
...equations by SIP for seven-point three-dimensional	molecule, iterate to convergence	D03ECF
...equations by SIP, five-point two-dimensional	molecule, one iteration	D03UAF

...equations by SIP, seven-point three-dimensional	<b>molecule</b> , one iteration	D03UBF
	Pearson product- <b>moment</b> correlation coefficients, all variables, casewise...	G02BBF
	Pearson product- <b>moment</b> correlation coefficients, all variables, no missing values	G02BAF
	Pearson product- <b>moment</b> correlation coefficients, all variables, pairwise...	G02BCF
	Pearson product- <b>moment</b> correlation coefficients, subset of variables, casewise...	G02BHF
	Pearson product- <b>moment</b> correlation coefficients, subset of variables, no missing values	G02BGF
	Pearson product- <b>moment</b> correlation coefficients, subset of variables, pairwise...	G02BJF
	Cumulants and <b>moments</b> of quadratic forms in Normal variables	G01NAF
	<b>Moments</b> of ratios of quadratic forms in Normal variables,...	G01NBF
	Interpolating functions, <b>monotonicity-preserving</b> , piecewise cubic Hermite, one variable	E01BEF
Multi-dimensional quadrature over hyper-rectangle,	<b>Monte</b> Carlo method	D01GBF
	<b>Mood's</b> and David's tests on two samples of unequal size	G08BAF
Calculates the zeros of a vector autoregressive (or	<b>moving</b> average) operator	G13DXF
	Interpret <b>MPSX</b> data file defining IP or LP problem, optimize and print...	H02BFF
	Convert <b>MPSX</b> data file defining IP or LP problem to format required by...	H02BUF
	Converts <b>MPSX</b> data file defining LP or QP problem to format required...	E04MZF
	<b>Multi-dimensional</b> adaptive quadrature over hyper-rectangle	D01FCF
	<b>Multi-dimensional</b> adaptive quadrature over hyper-rectangle,...	D01EAF
	<b>Multi-dimensional</b> complex discrete Fourier transform of...	C06FJF
	<b>Multi-dimensional</b> complex discrete Fourier transform of...	C06PJF
One-dimensional complex discrete Fourier transform of	<b>multi-dimensional</b> data	C06FFF
Multi-dimensional complex discrete Fourier transform of	<b>multi-dimensional</b> data	C06FJF
One-dimensional complex discrete Fourier transform of	<b>multi-dimensional</b> data (using complex data type)	C06PFF
Multi-dimensional complex discrete Fourier transform of	<b>multi-dimensional</b> data (using complex data type)	C06PJF
	<b>Multi-dimensional</b> Gaussian quadrature over hyper-rectangle	D01FBF
	<b>Multi-dimensional</b> quadrature, general product region,...	D01GCF
	<b>Multi-dimensional</b> quadrature, general product region,...	D01GDF
	<b>Multi-dimensional</b> quadrature over an <i>n</i> -simplex	D01PAF
	<b>Multi-dimensional</b> quadrature over an <i>n</i> -sphere, allowing for...	D01JAF
	<b>Multi-dimensional</b> quadrature over hyper-rectangle, Monte Carlo...	D01GBF
	<b>Multi-dimensional</b> quadrature, Sag-Szekeres method,...	D01DFD
Elliptic PDE, solution of finite difference equations by a	<b>multigrid</b> technique	D03EDF
	Multivariate time series, estimation of <b>multi-input</b> model	G13BEF
Multivariate time series, update state set for forecasting from	<b>multi-input</b> model	G13BGF
Multivariate time series, forecasting from state set of	<b>multi-input</b> model	G13BHF
Multivariate time series, state set and forecasts from fully specified	<b>multi-input</b> model	G13BJF
	Complex conjugate of <b>multiple</b> Hermitian sequences	C06GQF
Multi-dimensional adaptive quadrature over hyper-rectangle,	<b>multiple</b> integrands	D01EAF
	<b>Multiple</b> linear regression, from correlation coefficients,...	G02CGF
	<b>Multiple</b> linear regression, from correlation-like coefficients,...	G02CHF
	Fits a general ( <b>multiple</b> ) linear regression model	G02DAF
Service routines for	<b>multiple</b> linear regression, re-order elements of vectors and matrices	G02CFF
Service routines for	<b>multiple</b> linear regression, select elements from vectors and matrices	G02CEF
	<b>Multiple</b> one-dimensional complex discrete Fourier transforms	C06FRF
	<b>Multiple</b> one-dimensional complex discrete Fourier transforms...	C06PRF
	<b>Multiple</b> one-dimensional complex discrete Fourier transforms...	C06PSF
	<b>Multiple</b> one-dimensional Hermitian discrete Fourier transforms	C06PQF
	<b>Multiple</b> one-dimensional real and Hermitian complex...	C06PPF
	<b>Multiple</b> one-dimensional real and Hermitian complex...	C06PQF
	<b>Multiple</b> one-dimensional real discrete Fourier transforms	C06PFF
...error bounds of real system of linear equations,	<b>multiple</b> right-hand sides	F07AHF
...bounds of complex system of linear equations,	<b>multiple</b> right-hand sides	F07AVF
...bounds of real band system of linear equations,	<b>multiple</b> right-hand sides	F07BHF
...bounds of complex band system of linear equations,	<b>multiple</b> right-hand sides	F07BVF
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides	F07FFH
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides	F07FVF
...positive-definite band system of linear equations,	<b>multiple</b> right-hand sides	F07HHF
...positive-definite band system of linear equations,	<b>multiple</b> right-hand sides	F07HVF
...symmetric indefinite system of linear equations,	<b>multiple</b> right-hand sides	F07MHF
...Hermitian indefinite system of linear equations,	<b>multiple</b> right-hand sides	F07MVF
...complex symmetric system of linear equations,	<b>multiple</b> right-hand sides	F07NVF
Solution of real triangular system of linear equations,	<b>multiple</b> right-hand sides	F07TEF
...of real triangular system of linear equations,	<b>multiple</b> right-hand sides	F07THF
Solution of complex triangular system of linear equations,	<b>multiple</b> right-hand sides	F07TSF
...complex triangular system of linear equations,	<b>multiple</b> right-hand sides	F07TVF
Solution of real band triangular system of linear equations,	<b>multiple</b> right-hand sides	F07VEF
...real band triangular system of linear equations,	<b>multiple</b> right-hand sides	F07VHF
Solution of complex band triangular system of linear equations,	<b>multiple</b> right-hand sides	F07VSF
...complex band triangular system of linear equations,	<b>multiple</b> right-hand sides	F07VVF
Solution of real simultaneous linear equations with	<b>multiple</b> right-hand sides (Black Box)	F04AAF
...positive-definite banded simultaneous linear equations with	<b>multiple</b> right-hand sides (Black Box)	F04ACF
Solution of complex simultaneous linear equations with	<b>multiple</b> right-hand sides (Black Box)	F04ADF
	Solves system of equations with <b>multiple</b> right-hand sides, complex triangular coefficient matrix	F06ZJF
Solution of real system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07ADF	F07AEF
Solution of complex system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07ARF	F07ASF
Solution of real band system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07BDF	F07BEF
Solution of complex band system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07BRF	F07BSF
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07PDF	F07BEF
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07FRF	F07FSF
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07GRF,...	F07GEF
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07GRF,...	F07GSF
...positive-definite band system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07HDF	F07HEF
...positive-definite band system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07HRF	F07HSF
Solution of real symmetric indefinite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07MDF	F07MEF
...Hermitian indefinite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07MRF	F07MSF
Solution of complex symmetric system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07NRF	F07NSF
Solution of real symmetric indefinite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07PDF,...	F07PEF
...Hermitian indefinite system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07PRF,...	F07PSF
Solution of complex symmetric system of linear equations,	<b>multiple</b> right-hand sides, matrix already factorized by F07QRF,...	F07QSF
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07GHF
...positive-definite system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07GVF
...symmetric indefinite system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07PHF
...Hermitian indefinite system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07PVF
...complex symmetric system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07QVF
Solution of real triangular system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07UEF
...of real triangular system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07UHF
Solution of complex triangular system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07USF
...complex triangular system of linear equations,	<b>multiple</b> right-hand sides, packed storage	F07UVF
	Solves system of equations with <b>multiple</b> right-hand sides, real triangular coefficient matrix	F06YJF
...positive-definite simultaneous linear equations with	<b>multiple</b> right-hand sides using iterative refinement (Black Box)	F04ABF
Solution of real simultaneous linear equations with	<b>multiple</b> right-hand sides using iterative refinement (Black Box)	F04AEF
	Multivariate time series, <b>multiple</b> squared partial autocorrelations	G13DBF
	Matrix <b>multiplication</b>	F01CKF
Real sparse nonsymmetric matrix vector	<b>multiply</b>	F11XAF

Real sparse symmetric matrix vector	<b>multiply</b>	F11XEF
Complex sparse non-Hermitian matrix vector	<b>multiply</b>	F11XNF
Complex sparse Hermitian matrix vector	<b>multiply</b>	F11XSF
	<b>Multiply</b> complex vector by complex diagonal matrix	F06HCF
	<b>Multiply</b> complex vector by complex scalar	F06GDF
	<b>Multiply</b> complex vector by complex scalar, preserving input vector	F06HDF
	<b>Multiply</b> complex vector by real diagonal matrix	F06KCF
	<b>Multiply</b> complex vector by real scalar	F06JDF
	<b>Multiply</b> complex vector by real scalar, preserving input vector	F06KDF
	<b>Multiply</b> real vector by diagonal matrix	F06FCF
	<b>Multiply</b> real vector by scalar	F06EDF
	<b>Multiply</b> real vector by scalar, preserving input vector	F06FDF
Computes probabilities for the	<b>multivariate</b> Normal distribution	G01HBF
Set up reference vector for	<b>multivariate</b> Normal distribution	G05EAF
Pseudo-random	<b>multivariate</b> Normal vector from reference vector	G05EZF
	<b>Multivariate</b> time series, cross amplitude spectrum,...	G13CEF
	<b>Multivariate</b> time series, cross-correlations	G13BCF
	<b>Multivariate</b> time series, diagnostic checking of residuals,...	G13DSF
	<b>Multivariate</b> time series, differences and/or transforms...	G13DLF
	<b>Multivariate</b> time series, estimation of multi-input model	G13BEF
	<b>Multivariate</b> time series, estimation of VARMA model	G13DCF
	<b>Multivariate</b> time series, filtering by a transfer function model	G13BBF
	<b>Multivariate</b> time series, filtering (pre-whitening) by an ARIMA...	G13BAF
	<b>Multivariate</b> time series, forecasting from state set of multi-input...	G13BHF
	<b>Multivariate</b> time series, forecasts and their standard errors	G13DJF
Generates a realisation of a	<b>multivariate</b> time series from a VARMA model	G05HDF
	<b>Multivariate</b> time series, gain, phase, bounds, univariate and...	G13CFF
	<b>Multivariate</b> time series, multiple squared partial autocorrelations	G13DBF
	<b>Multivariate</b> time series, noise spectrum, bounds,...	G13CGF
	<b>Multivariate</b> time series, partial autoregression matrices	G13DPF
	<b>Multivariate</b> time series, preliminary estimation of...	G13BDF
	<b>Multivariate</b> time series, sample cross-correlation or...	G13DMF
	<b>Multivariate</b> time series, sample partial lag correlation matrices,...	G13DNF
	<b>Multivariate</b> time series, smoothed sample cross spectrum using...	G13CCF
	<b>Multivariate</b> time series, smoothed sample cross spectrum using...	G13CDF
	<b>Multivariate</b> time series, state set and forecasts from...	G13BJF
	<b>Multivariate</b> time series, update state set for forecasting from...	G13BGF
	<b>Multivariate</b> time series, updates forecasts and their standard errors	G13DKF
ODEs, IVP, interpolation for D02M-N routines,	<b>natural</b> interpolant	D02MZF
ODEs, IVP, interpolation for D02M-N routines,	<b>natural</b> interpolant	D02XJF
	<b>Negate</b> complex vector	F06HGF
	<b>Negate</b> real vector	F06FGF
Set up reference vector for generating pseudo-random integers,	<b>negative</b> binomial distribution	G05EEF
Pseudo-random real numbers,	<b>(negative)</b> exponential distribution	G05DBF
Generates a vector of random numbers from an	<b>(negative)</b> exponential distribution	G05FBF
	<b>Last non-negligible</b> element of real vector	F06KLF
Minimum, function of several variables, modified	<b>Newton</b> algorithm, simple bounds, using first and...	E04LBF
Minimum, function of several variables, modified	<b>Newton</b> algorithm, simple bounds, using first and...	E04LYF
Minimum, function of several variables, modified	<b>Newton</b> algorithm, simple bounds, using first derivatives...	E04KDF
Minimum, function of several variables, quasi-	<b>Newton</b> algorithm, simple bounds, using first derivatives (easy-to-use)	E04KYF
Minimum, function of several variables, modified	<b>Newton</b> algorithm, simple bounds, using first derivatives (easy-to-use)	E04KZF
Minimum, function of several variables, quasi-	<b>Newton</b> algorithm, simple bounds, using function values only...	E04JYF
...of squares, combined Gauss-Newton and quasi-	<b>Newton</b> algorithm using first derivatives (comprehensive)	E04GBF
...squares, combined Gauss-Newton and modified	<b>Newton</b> algorithm using first derivatives (comprehensive)	E04GDF
...of squares, combined Gauss-Newton and quasi-	<b>Newton</b> algorithm, using first derivatives (easy-to-use)	E04GYF
...squares, combined Gauss-Newton and modified	<b>Newton</b> algorithm using first derivatives (easy-to-use)	E04GZF
...squares, combined Gauss-Newton and modified	<b>Newton</b> algorithm using function values only (comprehensive)	E04CFE
...squares, combined Gauss-Newton and modified	<b>Newton</b> algorithm using function values only (easy-to-use)	E04FYF
...squares, combined Gauss-Newton and modified	<b>Newton</b> algorithm, using second derivatives (comprehensive)	E04HEF
...squares, combined Gauss-Newton and modified	<b>Newton</b> algorithm, using second derivatives (easy-to-use)	E04HYF
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and modified Newton algorithm using...	E04GDF
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and modified Newton algorithm using...	E04ZFE
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and modified Newton algorithm using function values only...	E04FCF
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and modified Newton algorithm using function values only...	E04FYF
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and modified Newton algorithm, using second derivatives...	E04HEF
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and modified Newton algorithm, using second derivatives...	E04HYF
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and quasi-Newton algorithm using first derivatives...	E04GBF
Unconstrained minimum of a sum of squares, combined Gauss-	<b>Newton</b> and quasi-Newton algorithm, using first derivatives...	E04GYF
	<b>NLP</b> problem (sparse)	E04UGF
	<b>Multivariate</b> time series, <b>noise</b> spectrum, bounds, impulse response function and...	G13CGF
One-dimensional quadrature,	<b>non-adaptive</b> , finite interval	D01BDF
One-dimensional quadrature,	<b>non-adaptive</b> , finite interval with provision for indefinite integrals	D01ARF
Computes probabilities for the	<b>non-central</b> beta distribution	G01GEF
Computes probabilities for the	<b>non-central</b> $\chi^2$ distribution	G01GCF
Computes probabilities for the	<b>non-central</b> $F$ -distribution	G01GDF
Computes probabilities for the	<b>non-central</b> Student's $t$ -distribution	G01GBF
Solution of complex sparse	<b>non-Hermitian</b> linear system, RGMRES, CGS, Bi-CGSTAB or...	F11DSF
Solution of complex sparse	<b>non-Hermitian</b> linear system, RGMRES, CGS, Bi-CGSTAB or...	F11DQF
Complex sparse	<b>non-Hermitian</b> linear systems, diagnostic for F11BSF	F11BTF
Complex sparse	<b>non-Hermitian</b> linear systems, incomplete $LU$ factorization	F11DNF
Complex sparse	<b>non-Hermitian</b> linear systems, preconditioned RGMRES, CGS,...	F11BSF
Complex sparse	<b>non-Hermitian</b> linear systems, set-up for F11BSF	F11BRF
...generated by applying SSOR to	complex sparse <b>non-Hermitian</b> matrix	F11DRF
	Complex sparse <b>non-Hermitian</b> matrix reorder routine	F11ZNF
	Complex sparse <b>non-Hermitian</b> matrix vector multiply	F11XNF
	ODEs, general <b>nonlinear</b> boundary value problem, collocation technique	D02TKF
	ODEs, general <b>nonlinear</b> boundary value problem, continuation facility for D02TKF	D02TXF
	ODEs, general <b>nonlinear</b> boundary value problem, diagnostics for D02TKF	D02TZF
	ODEs, general <b>nonlinear</b> boundary value problem, finite difference technique...	D02RAF
	ODEs, general <b>nonlinear</b> boundary value problem, interpolation for D02TKF	D02TYF
	ODEs, general <b>nonlinear</b> boundary value problem, set-up for D02TKF	D02TVF
Minimum of a sum of squares,	<b>nonlinear</b> constraints, sequential QP method, using function values...	E04UNF
Minimum, function of several variables, sequential QP method,	<b>nonlinear</b> constraints, using function values and...	E04UCF
Minimum, function of several variables, sequential QP method,	<b>nonlinear</b> constraints, using function values and...	E04UUF
	<b>Nonlinear</b> convolution Volterra-Abel equation, first kind,...	D05BEF
	<b>Nonlinear</b> convolution Volterra-Abel equation, second...	D05BDF
Solution of system of	<b>nonlinear</b> equations using first derivatives (comprehensive)	C05PCF
Solution of system of	<b>nonlinear</b> equations using first derivatives (easy-to-use)	C05PBF
Solution of system of	<b>nonlinear</b> equations using first derivatives (reverse communication)	C05PDF
Solution of system of	<b>nonlinear</b> equations using function values only (comprehensive)	C05NCF
Solution of system of	<b>nonlinear</b> equations using function values only (easy-to-use)	C05NBF
Solution of system of	<b>nonlinear</b> equations using function values only (reverse...	C05NDF
Covariance matrix for	<b>nonlinear</b> least-squares problem (unconstrained)	E04YCF
	<b>Nonlinear</b> optimization	E04

...difference technique with deferred correction, simple	<b>nonlinear problem</b>	D02GAF
	<b>Nonlinear regression</b>	E04
	<b>Nonlinear Volterra convolution equation, second kind</b>	D05BAF
Performs	<b>non-metric (ordinal) multidimensional scaling</b>	G03FCF
Last	<b>non-negligible element of real vector</b>	F06KLF
Kendall/Spearman	<b>non-parametric rank correlation coefficients, casewise treatment of...</b>	G02BPF
Kendall/Spearman	<b>non-parametric rank correlation coefficients, casewise treatment of...</b>	G02BRF
Kendall/Spearman	<b>non-parametric rank correlation coefficients, no missing values,...</b>	G02BNF
Kendall/Spearman	<b>non-parametric rank correlation coefficients, no missing values,...</b>	G02BQF
Kendall/Spearman	<b>non-parametric rank correlation coefficients, pairwise treatment of...</b>	G02BSF
	<b>Non-parametric tests</b>	G08
Initialise random number generating routines to give	<b>non-repeatable sequence</b>	G05CCF
Univariate time series, seasonal and	<b>non-seasonal differencing</b>	G13AAF
Linear	<b>non-singular Fredholm integral equation, second kind, smooth kernel</b>	D05ABF
Linear	<b>non-singular Fredholm integral equation, second kind, split kernel</b>	D05AAF
Solution of real sparse	<b>nonsymmetric linear system, RGMRES, CGS or...</b>	F11DEF
Solution of real sparse	<b>nonsymmetric linear system, RGMRES, CGS or...</b>	F11DCF
Real sparse	<b>nonsymmetric linear systems, diagnostic for F11BBF</b>	F11BCF
Real sparse	<b>nonsymmetric linear systems, diagnostic for F11BEF</b>	F11BFF
Real sparse	<b>nonsymmetric linear systems, incomplete LU factorization</b>	F11DAF
Real sparse	<b>nonsymmetric linear systems, preconditioned RGMRES, CGS,...</b>	F11BEF
Real sparse	<b>nonsymmetric linear systems, preconditioned RGMRES, CGS or...</b>	F11BBF
Real sparse	<b>nonsymmetric linear systems, set-up for F11BBF</b>	F11BAF
Real sparse	<b>nonsymmetric linear systems, set-up for F11BEF</b>	F11BDF
...matrix generated by applying SSOR to real sparse	<b>nonsymmetric matrix</b>	F11DDF
Real sparse	<b>nonsymmetric matrix reorder routine</b>	F11ZAF
Real sparse	<b>nonsymmetric matrix vector multiply</b>	F11XAF
	<b>Norm estimation (for use in condition estimation), complex matrix</b>	F04ZCF
	<b>Norm estimation (for use in condition estimation), real matrix</b>	F04YCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex band...		F06UBF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex general...		F06UAF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UEF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UDF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UMF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UHF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UHF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UGF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UJF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06ULF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex...		F06UKF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RBF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RAF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RMF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06REF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RDF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RJF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RLF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06RKF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real...		F06BMF
Compute Euclidean norm from scaled form		F06UBF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UAF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UEF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UDF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UMF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UHF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UHF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UGF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UJF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06ULF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UKF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RBF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RAF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RMF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06REF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RDF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RJF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RLF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06RKF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element,...		F06UBF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex band matrix		F06UAF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex general matrix		F06UEF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex Hermitian band matrix		F06UCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex Hermitian matrix		F06UDF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex Hermitian matrix,...		F06UMF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex Hessenberg matrix		F06UHF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex symmetric band matrix		F06UHF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex symmetric matrix		F06UGF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex symmetric matrix,...		F06UJF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex trapezoidal/triangular matrix		F06ULF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex triangular band matrix		F06ULF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, complex triangular matrix,...		F06UKF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real band matrix		F06RBF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real general matrix		F06RAF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real Hessenberg matrix		F06RMF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real symmetric band matrix		F06REF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real symmetric matrix		F06RCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real symmetric matrix, packed storage		F06RDF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real trapezoidal/triangular matrix		F06RJF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real triangular band matrix		F06RLF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real triangular matrix, packed storage		F06RKF
Compute Euclidean norm of complex vector		F06JJF
Update Euclidean norm of complex vector in scaled form		F06KJF
ODEs, IVP, weighted	<b>norm of local error estimate for D02M-N routines</b>	D02ZAF
Compute Euclidean norm of real vector		F06EJF
Compute weighted Euclidean norm of real vector		F06FKF
Update Euclidean norm of real vector in scaled form		F06FJF
Computes probabilities for the standard	<b>Normal distribution</b>	G01EAF
Computes deviates for the standard	<b>Normal distribution</b>	G01FAF
Computes probability for the bivariate	<b>Normal distribution</b>	G01HAF
Computes probabilities for the multivariate	<b>Normal distribution</b>	G01HBF
Pseudo-random real numbers,	<b>Normal distribution</b>	G05DDF
Set up reference vector for multivariate	<b>Normal distribution</b>	G05EAF
Generates a vector of random numbers from a	<b>Normal distribution</b>	G05FDF
Computes maximum likelihood estimates for parameters of the	<b>Normal distribution from grouped and/or censored data</b>	G07BBF

	Cumulative normal distribution function $P(x)$	S15ABF
	Complement of cumulative normal distribution function $Q(x)$	S15ACF
	Fits a generalized linear model with Normal errors	G02GAF
Computes $t$ -test statistic for a difference in means between two	Normal populations, confidence interval	G07CAF
Lineprinter scatterplot of one variable against	Normal scores	G01AHF
	Normal scores, accurate values	G01DAF
Ranks,	Normal scores, approximate Normal scores or exponential...	G01DBF
	Normal scores, approximate values	G01DBF
	Normal scores, approximate variance-covariance matrix	G01DCF
Ranks, Normal scores, approximate	Normal scores or exponential (Savage) scores	G01DHF
Cumulants and moments of quadratic forms in	Normal variables	G01NAF
Moments of ratios of quadratic forms in	Normal variables, and related statistics	G01NBF
Pseudo-random multivariate	Normal vector from reference vector	G05EZF
Shapiro and Wilk's $W$ test for	Normality	G01DDF
	Numerical differentiation, derivatives up to order 14,...	D04AAF
Estimate (using	numerical differentiation) gradient and/or Hessian of a function	E04XAF
...conservative form, method of lines, upwind scheme using	numerical flux function based on Riemann solver, one space variable	D03PFF
...coupled DAEs, method of lines, upwind scheme using	numerical flux function based on Riemann solver, one space variable	D03PLF
...coupled DAEs, method of lines, upwind scheme using	numerical flux function based on Riemann solver, remeshing,...	D03PSF
	Numerical integration	D01
Second-order ODEs, IVP, Runge-Kutta-Nystrom method		D02LAF
Update a weighted sum of squares matrix with a new	observation	G02BTF
Add/delete an	observation to/from a general linear regression model	G02DCF
Reorder data to give ordered distinct	observations	G10ZAF
Allocates	observations to groups according to selected rules...	G03DCF
$n$ th-order linear	ODEs, boundary value problem, collocation and least-squares	D02TGF
	ODEs, boundary value problem, collocation and least-squares,...	D02JAF
	ODEs, boundary value problem, collocation and least-squares,...	D02JBF
	ODEs, boundary value problem, finite difference technique...	D02GBF
	ODEs, boundary value problem, finite difference technique...	D02GAF
	ODEs, boundary value problem, shooting and matching,...	D02HAF
	ODEs, boundary value problem, shooting and matching,...	D02HBF
	ODEs, boundary value problem, shooting and matching technique,...	D02AGF
	ODEs, boundary value problem, shooting and matching technique,...	D02SAF
	ODEs, general nonlinear boundary value problem,...	D02TKF
	ODEs, general nonlinear boundary value problem,...	D02XKF
	ODEs, general nonlinear boundary value problem,...	D02ZKF
	ODEs, general nonlinear boundary value problem,...	D02RAF
	ODEs, general nonlinear boundary value problem,...	D02TYF
	ODEs, general nonlinear boundary value problem,...	D02TVF
	ODEs, IVP, Adams method, until function of solution is zero,...	D02CJF
	ODEs, IVP, Adams method with root-finding...	D02QFF
	ODEs, IVP, Adams method with root-finding...	D02QGF
	ODEs, IVP, BDF method, set-up for D02M-N routines	D02NVF
	ODEs, IVP, Blend method, set-up for D02M-N routines	D02NWF
	ODEs, IVP, DASSL method, set-up for D02M-N routines	D02MVF
Second-order	ODEs, IVP, diagnostics for D02LAF	D02LYF
	ODEs, IVP, diagnostics for D02QFF and D02QGF	D02QXF
	ODEs, IVP, error assessment diagnostics for D02PCF and D02PDF	D02PFZ
	ODEs, IVP, for use with D02M-N routines,...	D02NMF
	ODEs, IVP, for use with D02M-N routines,...	D02NSF
	ODEs, IVP, for use with D02M-N routines,...	D02NRF
	ODEs, IVP, for use with D02M-N routines,...	D02NUF
	ODEs, IVP, integration diagnostics for D02PCF and D02PDF	D02PYF
	ODEs, IVP, integrator diagnostics, for use with D02M-N routines	D02NYF
Second-order	ODEs, IVP, interpolation for D02LAF	D02LZF
	ODEs, IVP, interpolation for D02M-N routines, $C_1$ interpolant	D02XKF
	ODEs, IVP, interpolation for D02M-N routines, natural interpolant	D02MZF
	ODEs, IVP, interpolation for D02M-N routines, natural interpolant	D02XJF
	ODEs, IVP, interpolation for D02PDF	D02PXF
	ODEs, IVP, interpolation for D02QFF or D02QGF	D02QZF
	ODEs, IVP, resets end of range for D02PDF	D02PWF
	ODEs, IVP, root-finding diagnostics for D02QFF and D02QGF	D02QYF
	ODEs, IVP, Runge-Kutta method, integration over one step	D02PDF
	ODEs, IVP, Runge-Kutta method, integration over range with output	D02PCF
	ODEs, IVP, Runge-Kutta method, until function...	D02BJF
	ODEs, IVP, Runge-Kutta-Merson method, until...	D02BGF
	ODEs, IVP, Runge-Kutta-Merson method, until...	D02BHF
Second-order	ODEs, IVP, Runge-Kutta-Nystrom method	D02LAF
	ODEs, IVP, set-up for continuation calls to integrator,...	D02NZF
Second-order	ODEs, IVP, set-up for D02LAF	D02LXF
	ODEs, IVP, set-up for D02PCF and D02PDF	D02PVF
	ODEs, IVP, set-up for D02QFF and D02QGF	D02QWFF
	ODEs, IVP, sparse Jacobian, linear algebra diagnostics,...	D02NXF
	ODEs, IVP, weighted norm of local error estimate for D02M-N...	D02ZAF
Explicit	ODEs, stiff IVP, banded Jacobian (comprehensive)	D02NCF
Implicit/algebraic	ODEs, stiff IVP, banded Jacobian (comprehensive)	D02NHF
	ODEs, stiff IVP, BDF method, until function of solution is zero,...	D02EJF
Explicit	ODEs, stiff IVP, full Jacobian (comprehensive)	D02NBF
Implicit/algebraic	ODEs, stiff IVP, full Jacobian (comprehensive)	D02NGF
Explicit	ODEs, stiff IVP (reverse communication, comprehensive)	D02NMF
Implicit/algebraic	ODEs, stiff IVP (reverse communication, comprehensive)	D02NNF
Explicit	ODEs, stiff IVP, sparse Jacobian (comprehensive)	D02NDF
Implicit/algebraic	ODEs, stiff IVP, sparse Jacobian (comprehensive)	D02NJF
Single	one-dimensional complex discrete Fourier transform,...	C06PCF
Single	one-dimensional complex discrete Fourier transform, extra...	C06FCF
Single	one-dimensional complex discrete Fourier transform, no extra...	C06ECF
	One-dimensional complex discrete Fourier transform of...	C06FFF
	One-dimensional complex discrete Fourier transform of...	C06PFF
Multiple	one-dimensional complex discrete Fourier transforms	C06FRF
Multiple	one-dimensional complex discrete Fourier transforms using...	C06PRF
Multiple	one-dimensional complex discrete Fourier transforms using...	C06PSF
	One-dimensional Gaussian quadrature	D01BAF
Single	one-dimensional Hermitian discrete Fourier transform, extra...	C06FBF
Single	one-dimensional Hermitian discrete Fourier transform, no extra...	C06EBF
Multiple	one-dimensional Hermitian discrete Fourier transforms	C06FQF
	One-dimensional quadrature, adaptive, finite interval,...	D01ALF
	One-dimensional quadrature, adaptive, finite interval,...	D01AKF
	One-dimensional quadrature, adaptive, finite interval,...	D01AHF
	One-dimensional quadrature, adaptive, finite interval,...	D01AJF
	One-dimensional quadrature, adaptive, finite interval,...	D01ATF
	One-dimensional quadrature, adaptive, finite interval,...	D01AUF
	One-dimensional quadrature, adaptive, finite interval,...	D01AQF
	One-dimensional quadrature, adaptive, finite interval,...	D01ANF
	One-dimensional quadrature, adaptive, finite interval,...	D01APF
	One-dimensional quadrature, adaptive, infinite or semi-infinite...	D01AMF
	One-dimensional quadrature, adaptive, semi-infinite interval,...	D01ASF
	One-dimensional quadrature, integration of function defined by...	D01GAF
	One-dimensional quadrature, non-adaptive, finite interval	D01BDF

	One-dimensional quadrature, non-adaptive, finite interval with...	D01ARF
Single	one-dimensional real and Hermitian complex discrete Fourier...	C06PAF
Multiple	one-dimensional real and Hermitian complex discrete Fourier...	C06PPF
Multiple	one-dimensional real and Hermitian complex discrete Fourier...	C06PQF
Single	one-dimensional real discrete Fourier transform, extra workspace...	C06FAF
Single	one-dimensional real discrete Fourier transform, no extra workspace	C06EAF
Multiple	one-dimensional real discrete Fourier transforms	C06FPF
Computes probabilities for the	one-sample Kolmogorov–Smirnov distribution	G01EYF
Performs the	one-sample Kolmogorov–Smirnov test for a user-supplied distribution	G08CCF
Performs the	one-sample Kolmogorov–Smirnov test for standard distributions	G08CBF
Performs the Wilcoxon	one-sample (matched pairs) signed rank test	G08AGF
Kruskal–Wallis	one-way analysis of variance on $k$ samples of unequal size	G08AFF
	Open unit number for reading, writing or appending,...	X04ACF
	Operations Research	H
	Operations with orthogonal matrices, form rows of $Q$ ,...	F01QKF
	Operations with unitary matrices, form rows of $Q$ ,...	F01RKF
Calculates the zeros of a vector autoregressive (or moving average)	operator	G13DXF
	Korobov optimal coefficients for use in D01GCF or D01GDF,...	D01GYF
	Korobov optimal coefficients for use in D01GCF or D01GDF,...	D01GZF
	Nonlinear optimization	E04
	Order statistics	G01D
Reorder data to give	ordered distinct observations	G10ZAF
Performs non-metric (ordinal) multidimensional scaling		G03PCF
Operations with	orthogonal matrices, form rows of $Q$ ,...	F01QKF
Computes random	orthogonal matrix	G05GAF
Computes	orthogonal polynomials or dummy variables for...	G04EAF
Form all or part of	orthogonal $Q$ from $LQ$ factorization determined by F08AHF	F08AJF
Form all or part of	orthogonal $Q$ from $QR$ factorization determined by F08AEF or...	F08AFJ
	Orthogonal reduction of real general matrix to upper Hessenberg form	F08NEF
	Orthogonal reduction of real general rectangular matrix to...	F08KEF
	Orthogonal reduction of real symmetric band matrix to...	F08HEF
	Orthogonal reduction of real symmetric matrix to...	F08FEF
	Orthogonal reduction of real symmetric matrix to...	F08GEF
Computes	orthogonal rotations for loading matrix,...	G03BAF
Reorder Schur factorization of real matrix using	orthogonal similarity transformation	F08QFF
	Orthogonal similarity transformation of real symmetric matrix as...	F06QMF
Apply	orthogonal transformation determined by F08AEF or F08BEF	F08AGF
Apply	orthogonal transformation determined by F08AHF	F08AKF
Apply	orthogonal transformation determined by F08FEF	F08FGF
Apply	orthogonal transformation determined by F08GEF	F08GGF
Generate	orthogonal transformation matrices from reduction to...	F08KFF
Generate	orthogonal transformation matrix from reduction to...	F08NFF
Apply	orthogonal transformation matrix from reduction to...	F08NGF
Generate	orthogonal transformation matrix from reduction to...	F08FFF
Generate	orthogonal transformation matrix from reduction to...	F08GFF
Apply	orthogonal transformations from reduction to bidiagonal form...	F08KGF
Gram–Schmidt	orthogonalisation of $n$ vectors of order $m$	F05AAF
Computes orthogonal rotations for loading matrix, generalized	orthomax criterion	G03BAF
...adaptive, finite interval, method suitable for	oscillating functions	D01AKF
	Osher's approximate Riemann solver for Euler equations...	D03PVF
Compute quotient of two real scalars, with	overflow flag	F06BLF
Compute quotient of two complex scalars, with	overflow flag	F06CLF
Incomplete Gamma functions $P(a, x)$ and $Q(a, x)$		S14BAF
Cumulative normal distribution function $P(x)$		S15ABF
Convert real matrix between	packed banded and rectangular storage schemes	F01ZCF
Convert complex matrix between	packed banded and rectangular storage schemes	F01ZDF
Print real	packed banded matrix (comprehensive)	X04CFF
Print complex	packed banded matrix (comprehensive)	X04DFD
Print real	packed banded matrix (easy-to-use)	X04CEF
Print complex	packed banded matrix (easy-to-use)	X04DEF
Matrix-vector product, real symmetric	packed matrix	F06PEF
Matrix-vector product, real triangular	packed matrix	F06PHF
System of equations, real triangular	packed matrix	F06PLF
Rank-1 update, real symmetric	packed matrix	F06PQF
Rank-2 update, real symmetric	packed matrix	F06PSF
Matrix-vector product, complex Hermitian	packed matrix	F06SEF
Matrix-vector product, complex triangular	packed matrix	F06SHF
System of equations, complex triangular	packed matrix	F06SLF
Rank-1 update, complex Hermitian	packed matrix	F06SQF
Rank-2 update, complex Hermitian	packed matrix	F06SSF
...largest absolute element, real symmetric matrix, packed	storage	F06RDF
...largest absolute element, real triangular matrix, packed	storage	F06RKF
...largest absolute element, complex Hermitian matrix, packed	storage	F06UDF
...largest absolute element, complex symmetric matrix, packed	storage	F06UGF
...absolute element, complex triangular matrix, packed	storage	F06UKF
Cholesky factorization of real symmetric positive-definite matrix, packed	storage	F07GDF
...right-hand sides, matrix already factorized by F07GDF, packed	storage	F07GEF
...matrix, matrix already factorized by F07GDF, packed	storage	F07GGF
...linear equations, multiple right-hand sides, packed	storage	F07GHF
...matrix, matrix already factorized by F07GDF, packed	storage	F07GJF
...of complex Hermitian positive-definite matrix, packed	storage	F07GRF
...right-hand sides, matrix already factorized by F07GRF, packed	storage	F07GSF
...matrix, matrix already factorized by F07GRF, packed	storage	F07GUF
...linear equations, multiple right-hand sides, packed	storage	F07GVF
...matrix, matrix already factorized by F07GRF, packed	storage	F07GWF
Bunch–Kaufman factorization of real symmetric indefinite matrix, packed	storage	F07PDF
...right-hand sides, matrix already factorized by F07PDF, packed	storage	F07PEF
...matrix, matrix already factorized by F07PDF, packed	storage	F07PGF
...linear equations, multiple right-hand sides, packed	storage	F07PHF
...matrix, matrix already factorized by F07PDF, packed	storage	F07PJF
...factorization of complex Hermitian indefinite matrix, packed	storage	F07PRF
...right-hand sides, matrix already factorized by F07PRF, packed	storage	F07PSF
...matrix, matrix already factorized by F07PRF, packed	storage	F07PUF
...linear equations, multiple right-hand sides, packed	storage	F07PVF
...matrix, matrix already factorized by F07PRF, packed	storage	F07PWF
Bunch–Kaufman factorization of complex symmetric matrix, packed	storage	F07QRF
...right-hand sides, matrix already factorized by F07QRF, packed	storage	F07QSF
...matrix, matrix already factorized by F07QRF, packed	storage	F07QUF
...linear equations, multiple right-hand sides, packed	storage	F07QVF

...matrix, matrix already factorized by F07QRF,	<b>packed</b> storage	F07QWF
...linear equations, multiple right-hand sides,	<b>packed</b> storage	F07UEF
Estimate condition number of real triangular matrix,	<b>packed</b> storage	F07UGF
...linear equations, multiple right-hand sides,	<b>packed</b> storage	F07UHF
Inverse of real triangular matrix,	<b>packed</b> storage	F07UJF
...linear equations, multiple right-hand sides,	<b>packed</b> storage	F07USF
Estimate condition number of complex triangular matrix,	<b>packed</b> storage	F07UUF
...linear equations, multiple right-hand sides,	<b>packed</b> storage	F07UVF
Inverse of complex triangular matrix,	<b>packed</b> storage	F07UWF
...symmetric matrix to symmetric tridiagonal form,	<b>packed</b> storage	F08GEF
...Hermitian matrix to real symmetric tridiagonal form,	<b>packed</b> storage	F08GSF
... $Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x$ ,	<b>packed</b> storage, $B$ factorized by F07GDF	F08TEF
... $Ax = \lambda Bx$ , $ABx = \lambda x$ or $BAx = \lambda x$ ,	<b>packed</b> storage, $B$ factorized by F07GRF	F08TSF
...optionally all eigenvectors of real symmetric matrix,	<b>packed</b> storage, using divide and conquer	F08GCF
...all eigenvectors of complex Hermitian matrix,	<b>packed</b> storage, using divide and conquer	F08GQF
Convert real matrix between	<b>packed</b> triangular and square storage schemes	F01ZAF
Convert complex matrix between	<b>packed</b> triangular and square storage schemes	F01ZBF
Print real	<b>packed</b> triangular matrix (comprehensive)	X04CDF
Print complex	<b>packed</b> triangular matrix (comprehensive)	X04DDF
Print real	<b>packed</b> triangular matrix (easy-to-use)	X04CCF
Print complex	<b>packed</b> triangular matrix (easy-to-use)	X04DCF
Sign test on two	<b>paired</b> samples	G08AAF
Performs the Wilcoxon one-sample (matched	<b>pairs</b> (serial) test for randomness	G08EBF
Performs the	<b>pairs</b> signed rank test	G08AGF
Pearson product-moment correlation coefficients, all variables,	<b>pairwise</b> treatment of missing values	G02BCF
Correlation-like coefficients (about zero), all variables,	<b>pairwise</b> treatment of missing values	G02BFF
...correlation coefficients, subset of variables,	<b>pairwise</b> treatment of missing values	G02BJF
Correlation-like coefficients (about zero), subset of variables,	<b>pairwise</b> treatment of missing values	G02BMF
Kendall/Spearman non-parametric rank correlation coefficients,	<b>pairwise</b> treatment of missing values	G02BSF
General system of	<b>parabolic</b> PDEs, coupled DAEs, method of lines,...	D03PJF
General system of	<b>parabolic</b> PDEs, coupled DAEs, method of lines,...	D03PHF
General system of	<b>parabolic</b> PDEs, coupled DAEs, method of lines,...	D03PPF
General system of	<b>parabolic</b> PDEs, method of lines, Chebyshev $C^0$ collocation,...	D03PDF
General system of	<b>parabolic</b> PDEs, method of lines, finite differences,...	D03PCF
Kendall/Spearman non-	<b>parametric</b> rank correlation coefficients, casewise treatment...	G02BPF
Kendall/Spearman non-	<b>parametric</b> rank correlation coefficients, casewise treatment...	G02BRF
Kendall/Spearman non-	<b>parametric</b> rank correlation coefficients, no missing values,...	G02BNF
Kendall/Spearman non-	<b>parametric</b> rank correlation coefficients, no missing values,...	G02BQF
Kendall/Spearman non-	<b>parametric</b> rank correlation coefficients, pairwise treatment...	G02BSF
Non-	<b>parametric</b> tests	G08
Multivariate time series, multiple squared	<b>partial</b> autocorrelations	G13DBF
Univariate time series,	<b>partial</b> autocorrelations from autocorrelations	G13ACF
Multivariate time series,	<b>partial</b> autoregression matrices	G13DPF
Computes	<b>partial</b> correlation/variance-covariance matrix from...	G02BYF
Multivariate time series, sample	<b>partial</b> lag correlation matrices, $\chi^2$ statistics and significance levels	G13DNF
...spectrum using rectangular, Bartlett, Tukey or	<b>Parzen</b> lag window	G13CAF
...spectrum using rectangular, Bartlett, Tukey or	<b>Parzen</b> lag window	G13CCF
...quadrature, adaptive, finite interval, strategy due to	<b>Patterson</b> , suitable for well-behaved integrands	D01AHF
Elliptic	<b>PDE</b> , Helmholtz equation, three-dimensional Cartesian co-ordinates	D03FAF
Discretize a second-order	Elliptic <b>PDE</b> , Laplace's equation, two-dimensional arbitrary domain	D03EAF
elliptic	<b>PDE</b> on a rectangle	D03EEF
Elliptic	<b>PDE</b> , solution of finite difference equations by a multigrid technique	D03EDF
Elliptic	<b>PDE</b> , solution of finite difference equations by SIP,...	D03EBF
Elliptic	<b>PDE</b> , solution of finite difference equations by SIP,...	D03UAF
Elliptic	<b>PDE</b> , solution of finite difference equations by SIP,...	D03ECF
Elliptic	<b>PDE</b> , solution of finite difference equations by SIP,...	D03UBF
General system of parabolic	<b>PDEs</b> , coupled DAEs, method of lines, Chebyshev $C^0$ ...	D03PJF
General system of parabolic	<b>PDEs</b> , coupled DAEs, method of lines, finite differences,...	D03PHF
General system of parabolic	<b>PDEs</b> , coupled DAEs, method of lines, finite differences,...	D03PPF
General system of first-order	<b>PDEs</b> , coupled DAEs, method of lines, Keller box discretisation,...	D03PKF
General system of first-order	<b>PDEs</b> , coupled DAEs, method of lines, Keller box discretisation,...	D03PRF
General system of parabolic	<b>PDEs</b> , method of lines, Chebyshev $C^0$ collocation,...	D03PDF
General system of parabolic	<b>PDEs</b> , method of lines, finite differences,...	D03PCF
General system of second-order	<b>PDEs</b> , method of lines, finite differences, remeshing,...	D03RAF
General system of second-order	<b>PDEs</b> , method of lines, finite differences, remeshing,...	D03RBF
General system of first-order	<b>PDEs</b> , method of lines, Keller box discretisation,...	D03PEF
<b>PDEs</b> , spatial interpolation with D03PCF, D03PEF, D03PFF,...		D03PZF
<b>PDEs</b> , spatial interpolation with D03PDF or D03PJF		D03PYF
General system of convection-diffusion	<b>PDEs</b> with source terms in conservative form,...	D03PLF
General system of convection-diffusion	<b>PDEs</b> with source terms in conservative form,...	D03PSF
General system of convection-diffusion	<b>PDEs</b> with source terms in conservative form,...	D03PFF
Pearson product-moment correlation coefficients,...		G02BBF
Pearson product-moment correlation coefficients,...		G02BAF
Pearson product-moment correlation coefficients,...		G02BCF
Pearson product-moment correlation coefficients,...		G02BHF
Pearson product-moment correlation coefficients,...		G02BGF
Pearson product-moment correlation coefficients,...		G02BJF
...from set of classification factors using given	<b>percentile/quantile</b>	G11BBF
Invert a	<b>permutation</b>	M01ZAF
Check validity of a	<b>permutation</b>	M01ZBF
Decompose a	<b>permutation</b> into cycles	M01ZCF
Pseudo-random	<b>permutation</b> of an integer vector	G05EHF
Permute rows or columns, real rectangular matrix,	<b>permutations</b> represented by a real array	F06QKF
Permute rows or columns, complex rectangular matrix,	<b>permutations</b> represented by a real array	F06VKF
Permute rows or columns, real rectangular matrix,	<b>permutations</b> represented by an integer array	F06QJF
Permute rows or columns, complex rectangular matrix,	<b>permutations</b> represented by an integer array	F06VJF
Permute rows or columns, complex rectangular matrix,...		F06VKF
Permute rows or columns, complex rectangular matrix,...		F06VJF
Permute rows or columns, real rectangular matrix,...		F06QKF
Permute rows or columns, real rectangular matrix,...		F06QJF
Multivariate time series, gain,	<b>phase</b> , bounds, univariate and bivariate (cross) spectra	G13CFF
Provides the mathematical constant $\pi$		X01AAF
Interpolating functions, monotonicity-preserving,	<b>piecewise</b> cubic Hermite, one variable	E01BEF
...quadrature, adaptive, finite interval, strategy due to	<b>Piessens</b> and de Doncker, allowing for badly-behaved integrands	D01AJF
QR factorization of real general rectangular matrix with column	<b>pivoting</b>	F08BEF
...complex general rectangular matrix with column	<b>pivoting</b>	F08BSF

Triangulation of	<b>plane</b> region	D03MAF
Generate real	<b>plane</b> rotation	F06AAF
Generate real Jacobi	<b>plane</b> rotation	F06BEF
Apply real	<b>plane</b> rotation	F06EPF
Apply complex	<b>plane</b> rotation	F06HPF
Generate real	<b>plane</b> rotation, storing tangent	F06BAF
Generate complex	<b>plane</b> rotation, storing tangent, real cosine	F06CAF
Generate complex	<b>plane</b> rotation, storing tangent, real sine	F06CBF
Apply real	<b>plane</b> rotation to two complex vectors	F06KPF
Apply	<b>plane</b> rotation to two real sparse vectors	F06EXF
Apply real symmetric	<b>plane</b> rotation to two vectors	F06FPF
Generate sequence of real	<b>plane</b> rotations	F06FQF
Generate sequence of complex	<b>plane</b> rotations	F06HQF
...transformation of real symmetric matrix as a sequence of	<b>plane</b> rotations	F06QMF
... <i>U</i> real upper triangular, <i>Z</i> a sequence of	<b>plane</b> rotations	F06QTF
...transformation of Hermitian matrix as a sequence of	<b>plane</b> rotations	F06TMF
... <i>U</i> complex upper triangular, <i>Z</i> a sequence of	<b>plane</b> rotations	F06TTF
Apply sequence of	<b>plane</b> rotations, complex rectangular matrix, complex cosine...	F06TYF
Apply sequence of	<b>plane</b> rotations, complex rectangular matrix, real cosine and sine	F06VXF
<i>QR</i> or <i>RQ</i> factorization by sequence of	<b>plane</b> rotations, complex upper Hessenberg matrix	F06TRF
<i>QR</i> or <i>RQ</i> factorization by sequence of	<b>plane</b> rotations, complex upper spiked matrix	F06TSF
Compute upper Hessenberg matrix by sequence of	<b>plane</b> rotations, complex upper triangular matrix	F06TVF
Compute upper spiked matrix by sequence of	<b>plane</b> rotations, complex upper triangular matrix	F06TWf
<i>QRxk</i> factorization by sequence of	<b>plane</b> rotations, complex upper triangular matrix...	F06TQF
<i>QR</i> factorization by sequence of	<b>plane</b> rotations, rank-1 update of complex upper triangular matrix	F06TPF
<i>QR</i> factorization by sequence of	<b>plane</b> rotations, rank-1 update of real upper triangular matrix	F06QPF
Apply sequence of	<b>plane</b> rotations, real rectangular matrix	F06QXF
<i>QR</i> or <i>RQ</i> factorization by sequence of	<b>plane</b> rotations, real upper Hessenberg matrix	F06QRF
<i>QR</i> or <i>RQ</i> factorization by sequence of	<b>plane</b> rotations, real upper spiked matrix	F06QSF
Compute upper Hessenberg matrix by sequence of	<b>plane</b> rotations, real upper triangular matrix	F06QVF
Compute upper spiked matrix by sequence of	<b>plane</b> rotations, real upper triangular matrix	F06QWF
<i>QR</i> factorization by sequence of	<b>plane</b> rotations, real upper triangular matrix augmented by a full row	F06QQF
Constructs a stem and leaf	<b>plot</b>	G01ARF
Constructs a box and whisker	<b>plot</b>	G01ASF
...needed for range-mean or standard deviation-mean	<b>plot</b>	G13AUF
Pseudo-random integer,	<b>Poisson</b> distribution	G05DRF
Set up reference vector for generating pseudo-random integers,	<b>Poisson</b> distribution	G05ECF
Computes confidence interval for the parameter of a	<b>Poisson</b> distribution	G07ABF
	<b>Poisson</b> distribution function	G01BKF
Fits a generalized linear model with	<b>Poisson</b> errors	G02GCF
Least-squares	<b>polynomial</b> fit, special data points (including interpolation)	E02AFF
Derivative of fitted	<b>polynomial</b> fit, values and derivatives may be constrained,...	E02AGF
Integral of fitted	<b>polynomial</b> in Chebyshev series form	E02AHF
Evaluation of fitted	<b>polynomial</b> in Chebyshev series form	E02AJF
Evaluation of fitted	<b>polynomial</b> in one variable, from Chebyshev series form	E02AKF
Evaluation of fitted	<b>polynomial</b> in one variable from Chebyshev series form...	E02AEF
Evaluation of fitted	<b>polynomial</b> in two variables	E02CBF
Interpolating functions,	<b>polynomial</b> interpolant, data may include derivative values,...	E01AEF
All zeros of complex	<b>polynomial</b> , modified Laguerre method	C02AFF
All zeros of real	<b>polynomial</b> , modified Laguerre method	C02AGF
Minimax curve fit by	<b>polynomials</b>	E02ACF
Least-squares curve fit, by	<b>polynomials</b> , arbitrary data points	E02ADF
Least-squares surface fit by	<b>polynomials</b> , data on lines	E02CAF
Computes orthogonal	<b>polynomials</b> or dummy variables for factor/classification variable	G04EAF
...for the Mann-Whitney <i>U</i> statistic, no ties in	<b>pooled</b> sample	G08AJF
...for the Mann-Whitney <i>U</i> statistic, ties in	<b>pooled</b> sample	G08AKF
Computes Mahalanobis squared distances for group or	<b>pooled</b> variance-covariance matrices (for use after G03DAF)	G03DBF
...for a difference in means between two Normal	<b>populations</b> , confidence interval	G07CAF
The machine	<b>precision</b>	X02AJF
Real inner product added to initial value, basic/additional	<b>precision</b>	X03AAF
Complex inner product added to initial value, basic/additional	<b>precision</b>	X03ABF
	<b>Pre-computed</b> weights and abscissae for Gaussian quadrature rules,...	D01BBF
Unconstrained minimum,	<b>pre-conditioned</b> conjugate gradient algorithm, function of...	E04DGF
...RGMRES, CGS or Bi-CGSTAB method, Jacobi or SSOR	<b>preconditioner</b> (Black Box)	F11DEF
...CGS, Bi-CGSTAB or TFQMR method, Jacobi or SSOR	<b>preconditioner</b> (Black Box)	F11DSF
...linear system, RGMRES, CGS or Bi-CGSTAB method,	<b>preconditioner</b> computed by F11DAF (Black Box)	F11DCF
...system, RGMRES, CGS, Bi-CGSTAB or TFQMR method,	<b>preconditioner</b> computed by F11DNF (Black Box)	F11DQF
Solution of linear system involving	<b>preconditioning</b> matrix generated by applying SSOR to...	F11JRF
Solution of linear system involving	<b>preconditioning</b> matrix generated by applying SSOR to...	F11DRF
Solution of linear system involving	<b>preconditioning</b> matrix generated by applying SSOR to...	F11DDF
Solution of linear system involving	<b>preconditioning</b> matrix generated by applying SSOR to...	F11JDF
Solution of linear system involving incomplete <i>LU</i>	<b>preconditioning</b> matrix generated by F11DAF	F11DBF
Solution of complex linear system involving incomplete <i>LU</i>	<b>preconditioning</b> matrix generated by F11DNF	F11DPF
Solution of linear system involving incomplete Cholesky	<b>preconditioning</b> matrix generated by F11JAF	F11JBF
Solution of complex linear system involving incomplete Cholesky	<b>preconditioning</b> matrix generated by F11JNF	F11JPF
Multivariate time series,	<b>preliminary</b> estimation of transfer function model	G13BDF
Univariate time series,	<b>preliminary</b> estimation, seasonal ARIMA model	G13ADF
Interpolating functions, monotonicity-	<b>preserving</b> , piecewise cubic Hermite, one variable	E01BEF
Multivariate time series, filtering ( <b>pre-whitening</b> ) by an ARIMA model		G13BAF
...in D01GCF or D01GDF, when number of points is	<b>prime</b>	D01GYF
...D01GDF, when number of points is product of two	<b>primes</b>	D01GZF
Performs	<b>principal</b> component analysis	G03AAF
Performs	<b>principal</b> co-ordinate analysis, classical metric scaling	G03FAF
...finite interval, weight function $1/(x - c)$ , Cauchy	<b>principal</b> value (Hilbert transform)	D01AQF
	<b>Print</b> complex general matrix (comprehensive)	X04DBF
	<b>Print</b> complex general matrix (easy-to-use)	X04DAF
	<b>Print</b> complex packed banded matrix (comprehensive)	X04DFE
	<b>Print</b> complex packed banded matrix (easy-to-use)	X04DEF
	<b>Print</b> complex packed triangular matrix (comprehensive)	X04DDF
	<b>Print</b> complex packed triangular matrix (easy-to-use)	X04DCF
	<b>Print</b> integer matrix (comprehensive)	X04EBF
	<b>Print</b> integer matrix (easy-to-use)	X04EAF
	<b>Print</b> real general matrix (comprehensive)	X04CFE
	<b>Print</b> real general matrix (easy-to-use)	X04CAF
	<b>Print</b> real packed banded matrix (comprehensive)	X04CFE
	<b>Print</b> real packed banded matrix (easy-to-use)	X04CEF
	<b>Print</b> real packed triangular matrix (comprehensive)	X04CDF
	<b>Print</b> real packed triangular matrix (easy-to-use)	X04CCF

Interpret MPSX data file defining IP or LP problem, optimize and	<b>print</b> solution	H02BFF
Computes Kaplan–Meier (product-limit) estimates of survival	<b>probabilities</b>	G12AAF
Computes upper and lower tail	<b>probabilities</b> and probability density function for the beta distribution	G01EEF
	Computes <b>probabilities</b> for $\chi^2$ distribution	G01ECF
	Computes <b>probabilities</b> for $F$ -distribution	G01EDF
	Computes <b>probabilities</b> for Student's $t$ -distribution	G01EBF
	Computes <b>probabilities</b> for the gamma distribution	G01EFF
	Computes the exact <b>probabilities</b> for the Mann–Whitney $U$ statistic, no ties in...	G08AJF
	Computes the exact <b>probabilities</b> for the Mann–Whitney $U$ statistic, ties in...	G08AKF
	Computes <b>probabilities</b> for the multivariate Normal distribution	G01HBF
	Computes <b>probabilities</b> for the non-central beta distribution	G01GEF
	Computes <b>probabilities</b> for the non-central $\chi^2$ distribution	G01GCF
	Computes <b>probabilities</b> for the non-central $F$ -distribution	G01GDF
	Computes <b>probabilities</b> for the non-central Student's $t$ -distribution	G01GBF
	Computes <b>probabilities</b> for the one-sample Kolmogorov–Smirnov distribution	G01EYF
	Computes <b>probabilities</b> for the standard Normal distribution	G01EAF
	Computes <b>probabilities</b> for the two-sample Kolmogorov–Smirnov distribution	G01EZF
Computes upper and lower tail probabilities and	<b>probability</b> density function for the beta distribution	G01EEF
...supplied cumulative distribution function or	<b>probability</b> distribution function	G05EXF
Computes lower tail	<b>probability</b> for a linear combination of (central) $\chi^2$ variables	G01JDF
	Computes <b>probability</b> for a positive linear combination of $\chi^2$ variables	G01JCF
	Computes <b>probability</b> for the bivariate Normal distribution	G01HAF
	Computes <b>probability</b> for the Studentized range statistic	G01EMF
	Computes <b>probability</b> for von Mises distribution	G01ERF
	Computes <b>Procrustes</b> rotations	G03BCF
	Real inner <b>product</b> added to initial value, basic/additional precision	X03AAF
	Complex inner <b>product</b> added to initial value, basic/additional precision	X03ABF
	Matrix-vector <b>product</b> , complex Hermitian band matrix	F06SDF
	Matrix-vector <b>product</b> , complex Hermitian matrix	F06SCF
	Matrix-vector <b>product</b> , complex Hermitian packed matrix	F06SEF
	Matrix-vector <b>product</b> , complex rectangular band matrix	F06SBF
	Matrix-vector <b>product</b> , complex rectangular matrix	F06SAF
	Matrix-vector <b>product</b> , complex triangular band matrix	F06SGF
	Matrix-vector <b>product</b> , complex triangular matrix	F06SFF
	Matrix-vector <b>product</b> , complex triangular packed matrix	F06SHF
	Dot <b>product</b> of two complex sparse vector, conjugated	F06GSF
	Dot <b>product</b> of two complex sparse vector, unconjugated	F06GRF
	Dot <b>product</b> of two complex vectors, conjugated	F06GBF
	Dot <b>product</b> of two complex vectors, unconjugated	F06GAF
...in D01GCF or D01GDF, when number of points is	<b>product</b> of two primes	D01GZF
	Dot <b>product</b> of two real sparse vectors	F06ERF
	Dot <b>product</b> of two real vectors	F06EAF
	Matrix-matrix <b>product</b> , one complex Hermitian matrix, one complex...	F06ZCF
	Matrix-matrix <b>product</b> , one complex symmetric matrix, one complex...	F06ZTF
	Matrix-matrix <b>product</b> , one complex triangular matrix, one complex...	F06ZFF
	Matrix-matrix <b>product</b> , one real symmetric matrix, one real rectangular matrix	F06YCF
	Matrix-matrix <b>product</b> , one real triangular matrix, one real rectangular matrix	F06YFF
	Matrix-vector <b>product</b> , real rectangular band matrix	F06PBF
	Matrix-vector <b>product</b> , real rectangular matrix	F06PAF
	Matrix-vector <b>product</b> , real symmetric band matrix	F06PDF
	Matrix-vector <b>product</b> , real symmetric matrix	F06PCF
	Matrix-vector <b>product</b> , real symmetric packed matrix	F06PEF
	Matrix-vector <b>product</b> , real triangular band matrix	F06PGF
	Matrix-vector <b>product</b> , real triangular matrix	F06PFF
	Matrix-vector <b>product</b> , real triangular packed matrix	F06PHF
	Multi-dimensional quadrature, general <b>product</b> region, number-theoretic method	D01GCF
	Multi-dimensional quadrature, general <b>product</b> region, number-theoretic method, variant of D01GCF...	D01GDF
	Multi-dimensional quadrature, general <b>product</b> region, number-theoretic method, variant of D01GCF...	D01GDF
Multi-dimensional quadrature, Sag–Szekeres method, general	<b>product</b> region or $n$ -sphere	D01FDF
	Matrix-matrix <b>product</b> , two complex rectangular matrices	F06ZAF
	Matrix-matrix <b>product</b> , two real rectangular matrices	F06YAF
Computes Kaplan–Meier (product-limit) estimates of survival probabilities		G12AAF
	Pearson <b>product-moment</b> correlation coefficients, all variables, casewise...	G02BBF
	Pearson <b>product-moment</b> correlation coefficients, all variables, no missing...	G02BAF
	Pearson <b>product-moment</b> correlation coefficients, all variables, pairwise...	G02BCF
	Pearson <b>product-moment</b> correlation coefficients, subset of variables,...	G02BHF
	Pearson <b>product-moment</b> correlation coefficients, subset of variables,...	G02BGF
	Pearson <b>product-moment</b> correlation coefficients, subset of variables,...	G02BJF
	Integer <b>Programming</b> See IP	
	Linear <b>Programming</b> See LP	
	Quadratic <b>Programming</b> See QP	
	Integer <b>programming</b> solution, supplies further information on solution...	H02BZF
	Fits Cox's <b>proportional</b> hazard model	G12BAF
Creates the risk sets associated with the Cox	<b>proportional</b> hazards model for fixed covariates	G12ZAF
	<b>Pseudo-inverse</b> and rank of real $m$ by $n$ matrix ( $m \geq n$ )	F01BLF
	<b>Pseudo-random</b> integer from reference vector	G05EYF
	<b>Pseudo-random</b> integer from uniform distribution	G05DYF
	<b>Pseudo-random</b> integer, Poisson distribution	G05DRF
Set up reference vector for generating	<b>pseudo-random</b> integers, binomial distribution	G05EDF
Set up reference vector for generating	<b>pseudo-random</b> integers, hypergeometric distribution	G05EFF
Set up reference vector for generating	<b>pseudo-random</b> integers, negative binomial distribution	G05EEF
Set up reference vector for generating	<b>pseudo-random</b> integers, Poisson distribution	G05ECF
Set up reference vector for generating	<b>pseudo-random</b> integers, uniform distribution	G05EBF
	<b>Pseudo-random</b> logical (boolean) value	G05DZF
	<b>Pseudo-random</b> multivariate Normal vector from reference vector	G05EZF
Generates a vector of	<b>pseudo-random</b> numbers from a beta distribution	G05FEF
Generates a vector of	<b>pseudo-random</b> numbers from a gamma distribution	G05FFF
	<b>Pseudo-random</b> permutation of an integer vector	G05EHF
	<b>Pseudo-random</b> real numbers, Cauchy distribution	G05DFF
	<b>Pseudo-random</b> real numbers, $\chi^2$ distribution	G05DHF
	<b>Pseudo-random</b> real numbers, $F$ -distribution	G05DKF
	<b>Pseudo-random</b> real numbers, logistic distribution	G05DCF
	<b>Pseudo-random</b> real numbers, log-normal distribution	G05DEF
	<b>Pseudo-random</b> real numbers, (negative) exponential distribution	G05DBF
	<b>Pseudo-random</b> real numbers, Normal distribution	G05DDF
	<b>Pseudo-random</b> real numbers, Student's $t$ -distribution	G05DJF
	<b>Pseudo-random</b> real numbers, uniform distribution over $(0,1)$	G05CAF
	<b>Pseudo-random</b> real numbers, uniform distribution over $(a, b)$	G05DAF
	<b>Pseudo-random</b> real numbers, Weibull distribution	G05DPF
	<b>Pseudo-random</b> sample from an integer vector	G05EJF
Generates a vector of	<b>pseudo-random</b> variates from von Mises distribution	G05FSF
	Scaled derivatives of $\psi(x)$	S14ADF
Incomplete Gamma functions $P(a, x)$ and $Q(a, x)$		S14BAF

Complement of cumulative normal distribution function $Q(x)$		S15ACF
...reduced from real symmetric matrix using implicit	$QL$ or $QR$	F08JEF
...symmetric tridiagonal matrix, root-free variant of	$QL$ or $QR$	F08JFF
...from complex Hermitian matrix, using implicit	$QL$ or $QR$	F08JSF
Minimum, function of several variables, sequential	<b>QP</b> method, nonlinear constraints, using function values...	E04UCF
Minimum, function of several variables, sequential	<b>QP</b> method, nonlinear constraints, using function values...	E04UUF
Minimum of a sum of squares, nonlinear constraints, sequential	<b>QP</b> method, using function values and...	E04UNF
	<b>QP</b> problem (dense)	E04NFF
	Integer <b>QP</b> problem (dense)	H02CBF
	Convex <b>QP</b> problem or linearly-constrained linear least-squares problem...	E04NCF
	LP or <b>QP</b> problem (sparse)	E04NKF
	Integer LP or <b>QP</b> problem (sparse)	H02CEF
Converts MPSX data file defining LP or	<b>QP</b> problem to format required by E04NKF	E04MZF
	$QR$ factorization of complex general rectangular matrix...	F08BSF
	$QR$ factorization of real general rectangular matrix...	F08BEF
...real symmetric matrix using implicit	$QR$	F08JEF
...tridiagonal matrix, root-free variant of	$QR$	F08JFF
...complex Hermitian matrix, using implicit	$QR$	F08JSF
	$QR$ factorization by sequence of plane rotations, rank-1 update...	F06TPF
	$QR$ factorization by sequence of plane rotations, rank-1 update...	F06QPF
	$QR$ factorization by sequence of plane rotations,...	F06QQF
Form all or part of orthogonal $Q$ from	$QR$ factorization determined by F08AEF or F08BEF	F08ATF
Form all or part of unitary $Q$ from	$QR$ factorization determined by F08ASF or F08BSF	F08ATF
	$QR$ factorization of complex general rectangular matrix	F08ASF
	$QR$ factorization of real general rectangular matrix	F08AEF
	$QR$ factorization of $UZ$ or $RQ$ factorization of $ZU$ ,...	F06TTF
	$QR$ factorization of $UZ$ or $RQ$ factorization of $ZU$ ,...	F06QTF
	$QR$ factorization, possibly followed by SVD	F02WDF
	$QR$ or $RQ$ factorization by sequence of plane rotations,...	F06TRF
	$QR$ or $RQ$ factorization by sequence of plane rotations,...	F06TSF
	$QR$ or $RQ$ factorization by sequence of plane rotations,...	F06QRF
	$QR$ or $RQ$ factorization by sequence of plane rotations,...	F06QSF
	$QRxk$ factorization by sequence of plane rotations,...	F06TQF
All zeros of complex	<b>quadratic</b>	C02AHF
All zeros of real	<b>quadratic</b>	C02AJF
Cumulants and moments of	<b>quadratic</b> forms in Normal variables	G01NAF
Moments of ratios of	<b>quadratic</b> forms in Normal variables, and related statistics	G01NBF
One-dimensional Gaussian	<b>quadrature</b>	D01BAF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, allowing for singularities...	D01ALF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, method suitable for...	D01AKF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, strategy due to...	D01AHF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, strategy due to...	D01AJF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, variant of D01AJF...	D01ATF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, variant of D01AKF...	D01AUF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, weight function $1/(x - c)$ ,...	D01AQF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, weight function $\cos(\omega x)$ or...	D01ANF
One-dimensional	<b>quadrature</b> , adaptive, finite interval, weight function with...	D01APF
One-dimensional	<b>quadrature</b> , adaptive, infinite or semi-infinite interval	D01AMF
One-dimensional	<b>quadrature</b> , adaptive, semi-infinite interval,...	D01ASF
Two-dimensional	<b>quadrature</b> , finite region	D01DAF
Multi-dimensional	<b>quadrature</b> , general product region, number-theoretic method	D01GCF
Multi-dimensional	<b>quadrature</b> , general product region, number-theoretic method,...	D01GDF
One-dimensional	<b>quadrature</b> , integration of function defined by data values,...	D01GAF
One-dimensional	<b>quadrature</b> , non-adaptive, finite interval	D01BDF
One-dimensional	<b>quadrature</b> , non-adaptive, finite interval with provision for...	D01ARF
Multi-dimensional	<b>quadrature</b> over an $n$ -simplex	D01PAF
Multi-dimensional	<b>quadrature</b> over an $n$ -sphere, allowing for badly-behaved integrands	D01JAF
Multi-dimensional Gaussian	<b>quadrature</b> over hyper-rectangle	D01FBF
Multi-dimensional adaptive	<b>quadrature</b> over hyper-rectangle	D01FCF
Multi-dimensional adaptive	<b>quadrature</b> over hyper-rectangle, Monte Carlo method	D01GBF
Multi-dimensional adaptive	<b>quadrature</b> over hyper-rectangle, multiple integrands	D01EAF
Calculation of weights and abscissae for Gaussian	<b>quadrature</b> rules, general choice of rule	D01BCF
Pre-computed weights and abscissae for Gaussian	<b>quadrature</b> rules, restricted choice of rule	D01BBF
Multi-dimensional	<b>quadrature</b> , Sag-Szekeres method, general product region or $n$ -sphere	D01PDF
...classification factors using given percentile/ <b>quantile</b>		G11BBF
	Discrete <b>quarter-wave</b> cosine transform	C06HDF
	Discrete <b>quarter-wave</b> cosine transform (easy-to-use)	C06RDF
	Discrete <b>quarter-wave</b> sine transform	C06HCF
	Discrete <b>quarter-wave</b> sine transform (easy-to-use)	C06RCF
Minimum, function of several variables,	<b>quasi-Newton</b> algorithm, simple bounds, using first derivatives...	E04KYF
Minimum, function of several variables,	<b>quasi-Newton</b> algorithm, simple bounds, using function values only...	E04JYF
...a sum of squares, combined Gauss-Newton and	<b>quasi-Newton</b> algorithm using first derivatives (comprehensive)	E04GBF
...a sum of squares, combined Gauss-Newton and	<b>quasi-Newton</b> algorithm, using first derivatives (easy-to-use)	E04GYF
Left and right eigenvectors of real upper	<b>quasi-triangular</b> matrix	F08QKF
...selected eigenvalues and eigenvectors of real upper	<b>quasi-triangular</b> matrix	F08QLF
...equation $AX + XB = C$ , $A$ and $B$ are upper	<b>quasi-triangular</b> or transposes	F08QHF
	<b>Quotient</b> of two complex numbers	A02ACF
Compute	<b>quotient</b> of two complex scalars, with overflow flag	F06CLF
Compute	<b>quotient</b> of two real scalars, with overflow flag	F06BLF
...eigenvectors of generalized complex eigenproblem by	$QZ$ algorithm (Black Box)	F02GJF
...optionally eigenvectors of generalized eigenproblem by	$QZ$ algorithm, real matrices (Black Box)	F02BJF
	Computes <b>random</b> correlation matrix	G05GBF
	Pseudo- <b>random</b> integer from reference vector	G05EYF
	Pseudo- <b>random</b> integer from uniform distribution	G05DYF
	Pseudo- <b>random</b> integer, Poisson distribution	G05DRF
Set up reference vector for generating pseudo- <b>random</b> integers,	binomial distribution	G05EDF
Set up reference vector for generating pseudo- <b>random</b> integers,	hypergeometric distribution	G05EFF
Set up reference vector for generating pseudo- <b>random</b> integers,	negative binomial distribution	G05EEF
Set up reference vector for generating pseudo- <b>random</b> integers,	Poisson distribution	G05ECF
Set up reference vector for generating pseudo- <b>random</b> integers,	uniform distribution	G05EBF
	Pseudo- <b>random</b> logical (boolean) value	G05DZF
	Pseudo- <b>random</b> multivariate Normal vector from reference vector	G05EZF
Save state of <b>random</b> number generating routines		G05CFF
Restore state of <b>random</b> number generating routines		G05CGF
	Initialise <b>random</b> number generating routines to give non-repeatable sequence	G05CCF
	Initialise <b>random</b> number generating routines to give repeatable sequence	G05CBF
Generates a vector of pseudo- <b>random</b> numbers from a beta distribution		G05FEF
Generates a vector of pseudo- <b>random</b> numbers from a gamma distribution		G05FFF
Generates a vector of <b>random</b> numbers from a Normal distribution		G05PDF
Generates a vector of <b>random</b> numbers from a uniform distribution		G05FAF
Generates a vector of <b>random</b> numbers from an (negative) exponential distribution		G05FBF
Computes <b>random</b> orthogonal matrix		G05GAF
	Pseudo- <b>random</b> permutation of an integer vector	G05EHF
	Pseudo- <b>random</b> real numbers, Cauchy distribution	G05DFF

	Pseudo-random real numbers, $\chi^2$ distribution	G05DHF
	Pseudo-random real numbers, $F$ -distribution	G05DKF
	Pseudo-random real numbers, logistic distribution	G05DCF
	Pseudo-random real numbers, log-normal distribution	G05DEF
	Pseudo-random real numbers, (negative) exponential distribution	G05DBF
	Pseudo-random real numbers, Normal distribution	G05DDF
	Pseudo-random real numbers, Student's $t$ -distribution	G05DJF
	Pseudo-random real numbers, uniform distribution over (0,1)	G05CAF
	Pseudo-random real numbers, uniform distribution over (a, b)	G05DAF
	Pseudo-random real numbers, Weibull distribution	G05DPF
	Pseudo-random sample from an integer vector	G05EJF
	Generates a vector of pseudo-random variates from von Mises distribution	G05FSF
	Analysis of variance, randomized block or completely randomized design,...	G04BBF
Analysis of variance, randomized block or completely	randomized design, treatment means and standard errors	G04BBF
	Performs the runs up or runs down test for randomness	G08EAF
	Performs the pairs (serial) test for randomness	G08EBF
	Performs the triplets test for randomness	G08ECF
	Performs the gaps test for randomness	G08EDF
...problem, regular/singular system, finite/infinite	range, eigenvalue and eigenfunction, user-specified break-points	D02KEF
Second-order Sturm–Liouville problem, regular system, finite	range, eigenvalue only	D02KAF
...problem, regular/singular system, finite/infinite	range, eigenvalue only, user-specified break-points	D02KDF
	ODEs, IVP, resets end of range for D02PDF	D02PWF
	The safe range parameter	X02AMF
	The safe range parameter for complex floating-point arithmetic	X02ANF
Computes probability for the Studentized	range statistic	G01EMF
Computes deviates for the Studentized	range statistic	G01FMF
...function of solution is zero, integration over	range with intermediate output (simple driver)	D02BJF
ODEs, IVP, Runge–Kutta method, integration over	range with output	D02PCF
	Computes quantities needed for range-mean or standard deviation-mean plot	G13AUF
	Rank a vector, character data	M01DCF
	Rank a vector, integer numbers	M01DBF
	Rank a vector, real numbers	M01DAF
	Rank arbitrary data	M01DZF
	Rank columns of a matrix, integer numbers	M01DKF
	Rank columns of a matrix, real numbers	M01DJF
Kendall/Spearman non-parametric	rank correlation coefficients, casewise treatment of missing values,...	G02BPF
Kendall/Spearman non-parametric	rank correlation coefficients, casewise treatment of missing values,...	G02BRF
Kendall/Spearman non-parametric	rank correlation coefficients, no missing values, overwriting input data	G02BNF
Kendall/Spearman non-parametric	rank correlation coefficients, no missing values, preserving input data	G02BQF
Kendall/Spearman non-parametric	rank correlation coefficients, pairwise treatment of missing values	G02BSF
Pseudo-inverse and	rank of real $m$ by $n$ matrix ( $m \geq n$ )	F01BLF
	Rank rows of a matrix, integer numbers	M01DDF
	Rank rows of a matrix, real numbers	M01DEF
Performs the Wilcoxon one-sample (matched pairs) signed	rank test	G08AGF
	Rank-1 update, complex Hermitian matrix	F06SPF
	Rank-1 update, complex Hermitian packed matrix	F06SQF
	Rank-1 update, complex rectangular matrix, conjugated vector	F06SNF
	Rank-1 update, complex rectangular matrix, unconjugated vector	F06SMF
QR factorization by sequence of plane rotations,	rank-1 update of complex upper triangular matrix	F06TPF
QR factorization by sequence of plane rotations,	rank-1 update of real upper triangular matrix	F06QPF
	Rank-1 update, real rectangular matrix	F06PMF
	Rank-1 update, real symmetric matrix	F06PPF
	Rank-1 update, real symmetric packed matrix	F06PQF
	Rank-2 update, complex Hermitian matrix	F06SRF
	Rank-2 update, complex Hermitian packed matrix	F06SSF
	Rank-2 update, real symmetric matrix	F06PRF
	Rank-2 update, real symmetric packed matrix	F06PSF
	Rank-2k update of complex Hermitian matrix	F06ZRF
	Rank-2k update of complex symmetric matrix	F06ZVF
	Rank-2k update of real symmetric matrix	F06YRF
	Rank-k update of complex Hermitian matrix	F06ZPF
	Rank-k update of complex symmetric matrix	F06ZUF
	Rank-k update of real symmetric matrix	F06YPF
	Rearrange a vector according to given ranks, character data	M01ECF
	Rearrange a vector according to given ranks, complex numbers	M01EDF
	Rearrange a vector according to given ranks, integer numbers	M01EBF
	Ranks, Normal scores, approximate Normal scores or...	G01DHF
Rearrange a vector according to given	ranks, real numbers	M01EAF
Regression using	ranks, right-censored data	G08RBF
Regression using	ranks, uncensored data	G08RAF
	Evaluation of fitted rational function as computed by E02RAF	E02RBF
Interpolated values, evaluate	rational interpolant computed by E01RAF, one variable	E01RBF
Interpolating functions,	rational interpolant, one variable	E01RAF
	Generates a realisation of a multivariate time series from a VARMA model	G05HDF
	Rearrange a vector according to given ranks, character data	M01ECF
	Rearrange a vector according to given ranks, complex numbers	M01EDF
	Rearrange a vector according to given ranks, integer numbers	M01EBF
	Rearrange a vector according to given ranks, real numbers	M01EAF
Computes	reciprocal of Mills' Ratio	G01MBF
	Recover cosine and sine from given complex tangent, real cosine	F06CCF
	Recover cosine and sine from given complex tangent, real sine	F06CDF
	Recover cosine and sine from given real tangent	F06BCF
Multi-dimensional Gaussian quadrature over hyper-rectangle		D01FBF
Multi-dimensional adaptive quadrature over hyper-rectangle		D01FCF
Discretize a second-order elliptic PDE on a rectangle		D03EEF
Multi-dimensional quadrature over hyper-rectangle, Monte Carlo method		D01GBF
Multi-dimensional adaptive quadrature over hyper-rectangle, multiple integrands		D01EAF
Matrix-vector product, real	rectangular band matrix	F06PBF
Matrix-vector product, complex	rectangular band matrix	F06SBF
Univariate time series, smoothed sample spectrum using	rectangular, Bartlett, Tukey or Parzen lag window	G13CAF
Multivariate time series, smoothed sample cross spectrum using	rectangular, Bartlett, Tukey or Parzen lag window	G13CCF
Interpolating functions, fitting bicubic spline, data on	rectangular grid	E01DAF
...splines with automatic knot placement, data on	rectangular grid	E02DCF
Matrix-matrix product, two real	rectangular matrices	F06YAF
Matrix-matrix product, two complex	rectangular matrices	F06ZAF
Matrix-vector product, real	rectangular matrix	F06PAF
Rank-1 update, real	rectangular matrix	F06PMF
Matrix initialisation, real	rectangular matrix	F06QHF
Apply sequence of plane rotations, real	rectangular matrix	F06QXF
Matrix-vector product, complex	rectangular matrix	F06SAF
Matrix initialisation, complex	rectangular matrix	F06THF
Matrix-matrix product, one real symmetric matrix, one real	rectangular matrix	F06YCF
Matrix-matrix product, one real triangular matrix, one real	rectangular matrix	F06YFF
...product, one complex Hermitian matrix, one complex	rectangular matrix	F06ZCF

...product, one complex triangular matrix, one complex	<b>rectangular matrix</b>	F06ZFF
...product, one complex symmetric matrix, one complex	<b>rectangular matrix</b>	F06ZTF
<i>QR</i> factorization of real general	<b>rectangular matrix</b>	F08AEF
<i>LQ</i> factorization of real general	<b>rectangular matrix</b>	F08AHF
<i>QR</i> factorization of complex general	<b>rectangular matrix</b>	F08ASF
<i>LQ</i> factorization of complex general	<b>rectangular matrix</b>	F08AVF
Apply sequence of plane rotations, complex	<b>rectangular matrix, complex cosine and real sine</b>	F06TYF
Rank-1 update, complex	<b>rectangular matrix, conjugated vector</b>	F06SNF
Permute rows or columns, real	<b>rectangular matrix, permutations represented by a real array</b>	F06QKF
Permute rows or columns, complex	<b>rectangular matrix, permutations represented by a real array</b>	F06VKF
Permute rows or columns, real	<b>rectangular matrix, permutations represented by an integer array</b>	F06QJF
Permute rows or columns, complex	<b>rectangular matrix, permutations represented by an integer array</b>	F06VJF
Apply sequence of plane rotations, complex	<b>rectangular matrix, real cosine and complex sine</b>	F06TXF
Apply sequence of plane rotations, complex	<b>rectangular matrix, real cosine and sine</b>	F06VXF
Orthogonal reduction of real general	<b>rectangular matrix to bidiagonal form</b>	F08KEF
Unitary reduction of complex general	<b>rectangular matrix to bidiagonal form</b>	F08KSF
Rank-1 update, complex	<b>rectangular matrix, unconjugated vector</b>	F06SMF
<i>QR</i> factorization of real general	<b>rectangular matrix with column pivoting</b>	F08BEF
<i>QR</i> factorization of complex general	<b>rectangular matrix with column pivoting</b>	F08BSF
Matrix copy, real	<b>rectangular or trapezoidal matrix</b>	F06QFF
Matrix copy, complex	<b>rectangular or trapezoidal matrix</b>	F06TFF
...differences, remeshing, two space variables,	<b>rectangular region</b>	D03RAF
Convert real matrix between packed banded and	<b>rectangular storage schemes</b>	F01ZCF
Convert complex matrix between packed banded and	<b>rectangular storage schemes</b>	F01ZDF
...differences, remeshing, two space variables,	<b>rectilinear region</b>	D03RBF
SVD of real bidiagonal matrix	<b>reduced from complex general matrix</b>	F08MSF
...factorization of complex upper Hessenberg matrix	<b>reduced from complex general matrix</b>	F08PSF
...eigenvectors of real symmetric tridiagonal matrix,	<b>reduced from complex Hermitian matrix, using implicit <i>QL</i> or <i>QR</i></b>	F08JSF
...symmetric positive-definite tridiagonal matrix,	<b>reduced from complex Hermitian positive-definite matrix</b>	F08JUF
SVD of real bidiagonal matrix	<b>reduced from real general matrix</b>	F08MEF
...factorization of real upper Hessenberg matrix	<b>reduced from real general matrix</b>	F08PEF
...eigenvectors of real symmetric tridiagonal matrix,	<b>reduced from real symmetric matrix using implicit <i>QL</i> or <i>QR</i></b>	F08JEF
...symmetric positive-definite tridiagonal matrix,	<b>reduced from real symmetric positive-definite matrix</b>	F08JGF
Unitary	<b>reduction of complex general matrix to upper Hessenberg form</b>	F08NSF
Unitary	<b>reduction of complex general rectangular matrix to...</b>	F08KSF
Unitary	<b>reduction of complex Hermitian band matrix to...</b>	F08HSF
Unitary	<b>reduction of complex Hermitian matrix to...</b>	F08FSF
Unitary	<b>reduction of complex Hermitian matrix to...</b>	F08GSF
Orthogonal	<b>Reduction of complex Hermitian-definite banded generalized...</b>	F08USF
Orthogonal	<b>Reduction of complex rectangular band matrix to upper bidiagonal...</b>	F08LSF
Orthogonal	<b>reduction of real general matrix to upper Hessenberg form</b>	F08NEF
Orthogonal	<b>reduction of real general rectangular matrix to bidiagonal form</b>	F08KEF
Orthogonal	<b>Reduction of real rectangular band matrix to upper bidiagonal form</b>	F08LEF
Orthogonal	<b>reduction of real symmetric band matrix to symmetric tridiagonal...</b>	F08HEF
Orthogonal	<b>reduction of real symmetric matrix to symmetric tridiagonal form</b>	F08FEF
Orthogonal	<b>reduction of real symmetric matrix to symmetric tridiagonal...</b>	F08GEF
Orthogonal	<b>Reduction of real symmetric-definite banded generalized...</b>	F08UEF
Generate orthogonal transformation matrices from	<b>reduction to bidiagonal form determined by F08KEF</b>	F08KFF
Apply orthogonal transformations from	<b>reduction to bidiagonal form determined by F08KEF</b>	F08KGF
Generate unitary transformation matrices from	<b>reduction to bidiagonal form determined by F08KSF</b>	F08KTF
Apply unitary transformations from	<b>reduction to bidiagonal form determined by F08KSF</b>	F08KUF
Generate orthogonal transformation matrix from	<b>reduction to Hessenberg form determined by F08NEF</b>	F08NFF
Apply orthogonal transformation matrix from	<b>reduction to Hessenberg form determined by F08NEF</b>	F08NGF
Generate unitary transformation matrix from	<b>reduction to Hessenberg form determined by F08NSF</b>	F08NTF
Apply unitary transformation matrix from	<b>reduction to Hessenberg form determined by F08NSF</b>	F08NUF
Orthogonal	<b>Reduction to standard form, generalized real symmetric-definite...</b>	F01BVF
Orthogonal	<b>Reduction to standard form of complex Hermitian-definite...</b>	F08SSF
Orthogonal	<b>Reduction to standard form of complex Hermitian-definite...</b>	F08TSF
Orthogonal	<b>Reduction to standard form of real symmetric-definite generalized...</b>	F08SEF
Orthogonal	<b>Reduction to standard form of real symmetric-definite generalized...</b>	F08TEF
Generate orthogonal transformation matrix from	<b>reduction to tridiagonal form determined by F08FEF</b>	F08FFF
Generate unitary transformation matrix from	<b>reduction to tridiagonal form determined by F08FSF</b>	F08FTF
Generate orthogonal transformation matrix from	<b>reduction to tridiagonal form determined by F08GEF</b>	F08GFF
Generate unitary transformation matrix from	<b>reduction to tridiagonal form determined by F08GSF</b>	F08GTF
Pseudo-random integer from	<b>reference vector</b>	G05EYF
Pseudo-random multivariate Normal vector from	<b>reference vector</b>	G05EZF
Generate next term from	<b>reference vector for ARMA time series model</b>	G05EWF
Set up	<b>reference vector for generating pseudo-random integers...</b>	G05EDF
Set up	<b>reference vector for generating pseudo-random integers...</b>	G05EFF
Set up	<b>reference vector for generating pseudo-random integers...</b>	G05EEF
Set up	<b>reference vector for generating pseudo-random integers...</b>	G05ECF
Set up	<b>reference vector for multivariate Normal distribution</b>	G05EBF
Set up	<b>reference vector for univariate ARMA time series model</b>	G05EAF
Set up	<b>reference vector from supplied cumulative distribution function...</b>	G05EGF
Set up	<b>reference vector from supplied cumulative distribution function...</b>	G05EXF
Refined solution with error bounds of complex band system of...		F07BVF
Refined solution with error bounds of complex Hermitian...		F07MVF
Refined solution with error bounds of complex Hermitian...		F07PVF
Refined solution with error bounds of complex Hermitian...		F07HVF
Refined solution with error bounds of complex Hermitian...		F07FVF
Refined solution with error bounds of complex Hermitian...		F07GVF
Refined solution with error bounds of complex symmetric...		F07NVF
Refined solution with error bounds of complex symmetric...		F07QVF
Refined solution with error bounds of complex system of linear...		F07AVF
Refined solution with error bounds of real band system of linear...		F07BHF
Refined solution with error bounds of real symmetric indefinite...		F07MHF
Refined solution with error bounds of real symmetric indefinite...		F07PHF
Refined solution with error bounds of real symmetric...		F07HHF
Refined solution with error bounds of real symmetric...		F07FFH
Refined solution with error bounds of real symmetric...		F07GHF
Refined solution with error bounds of real system of...		F07AHF
Inverse of real symmetric positive-definite matrix using iterative	<b>refinement</b>	F01ABF
...with multiple right-hand sides using iterative	<b>refinement (Black Box)</b>	F04ABF
...with multiple right-hand sides using iterative	<b>refinement (Black Box)</b>	F04AEF
...unknowns, rank = $n$ , $m \geq n$ using iterative	<b>refinement (Black Box)</b>	F04AMF
...equations, one right-hand side using iterative	<b>refinement (Black Box)</b>	F04ASF
...equations, one right-hand side using iterative	<b>refinement (Black Box)</b>	F04ATF
...simultaneous linear equations using iterative	<b>refinement (coefficient matrix already factorized by F03AEF)</b>	F04AFF
Solution of real simultaneous linear equations using iterative	<b>refinement (coefficient matrix already factorized by F03AFF)</b>	F04AHF
Generate complex elementary	<b>reflection</b>	F06HRF
Apply complex elementary	<b>reflection</b>	F06HTF
Generate real elementary	<b>reflection, LINPACK style</b>	F06FSF
Apply real elementary	<b>reflection, LINPACK style</b>	F06UFU
Generate real elementary	<b>reflection, NAG style</b>	F06FRF
Apply real elementary	<b>reflection, NAG style</b>	F06FTF
Nonlinear	<b>regression</b>	E04
Robust	<b>regression, compute regression with user-supplied functions...</b>	G02HDF
Robust	<b>regression, compute weights for use with G02HDF</b>	G02HBF

	Multiple linear <b>regression</b> , from correlation coefficients, with constant term	G02CGF
	Multiple linear <b>regression</b> , from correlation-like coefficients, without constant term	G02CHF
	Fits a general (multiple) linear <b>regression</b> model	G02DAF
Add/delete an observation to/from a general linear <b>regression</b> model		G02DCF
Add a new variable to a general linear <b>regression</b> model		G02DEF
Delete a variable from a general linear <b>regression</b> model		G02DFD
Computes estimable function of a general linear <b>regression</b> model and its standard error		G02DNF
	Fits a linear <b>regression</b> model by forward selection	G02EEF
Estimates and standard errors of parameters of a general linear <b>regression</b> model for given constraints		G02DKF
	Fits a general linear <b>regression</b> model for new dependent variable	G02DGF
Estimates of linear parameters and general linear <b>regression</b> model from updated model		G02DDF
Service routines for multiple linear <b>regression</b> , re-order elements of vectors and matrices		G02DFF
Service routines for multiple linear <b>regression</b> , select elements from vectors and matrices		G02CEF
Robust <b>regression</b> , standard $M$ -estimates		G02HAF
	<b>Regression</b> using ranks, right-censored data	G08RBF
	<b>Regression</b> using ranks, uncensored data	G08RAF
Robust <b>regression</b> , variance-covariance matrix following G02HDF		G02HFF
Simple linear <b>regression</b> with constant term, missing values		G02CCF
Simple linear <b>regression</b> with constant term, no missing values		G02CAF
Simple linear <b>regression</b> without constant term, missing values		G02CDF
Simple linear <b>regression</b> without constant term, no missing values		G02CBF
Computes residual sums of squares for all possible linear <b>regressions</b> for a set of independent variables		G02EAF
Second-order Sturm–Liouville problem, <b>regular</b> system, finite range, eigenvalue only		D02KAF
Second-order Sturm–Liouville problem, <b>regular/singular</b> system, finite/infinite range, eigenvalue...		D02KEF
Second-order Sturm–Liouville problem, <b>regular/singular</b> system, finite/infinite range, eigenvalue only,...		D02KDF
...coupled DAEs, method of lines, finite differences, <b>remeshing</b> , one space variable		D03PPF
...DAEs, method of lines, Keller box discretisation, <b>remeshing</b> , one space variable		D03PRF
...numerical flux function based on Riemann solver, <b>remeshing</b> , one space variable		D03PSF
...second-order PDEs, method of lines, finite differences, <b>remeshing</b> , two space variables, rectangular region		D03RAF
...second-order PDEs, method of lines, finite differences, <b>remeshing</b> , two space variables, rectilinear region		D03RBF
Interpolating functions, method of <b>Renka</b> and Cline, two variables		E01SAF
	<b>Reorder</b> data to give ordered distinct observations	G10ZAF
Real sparse nonsymmetric matrix <b>reorder</b> routine		F11ZAF
Real sparse symmetric matrix <b>reorder</b> routine		F11ZBF
Complex sparse non-Hermitian matrix <b>reorder</b> routine		F11ZNF
Complex sparse Hermitian matrix <b>reorder</b> routine		F11ZPF
	<b>Reorder</b> Schur factorization of complex matrix, form orthonormal...	F08QUF
	<b>Reorder</b> Schur factorization of complex matrix using...	F08QTF
	<b>Reorder</b> Schur factorization of real matrix, form orthonormal...	F08QGF
	<b>Reorder</b> Schur factorization of real matrix using orthogonal...	F08QFF
Initialise random number generating routines to give <b>repeatable</b> sequence		G05CBF
Initialise random number generating routines to give non- <b>repeatable</b> sequence		G05CCF
...analysis model, factor loadings, communalities and <b>residual</b> correlations		G03CAF
Calculates $R^2$ and $C_P$ values from <b>residual</b> sums of squares		G02ECF
Computes <b>residual</b> sums of squares for all possible linear regressions for...		G02EAF
	Calculates standardized <b>residuals</b> and influence statistics	G02FAF
Univariate time series, diagnostic checking of <b>residuals</b> , following G13AEF or G13AFF		G13ASF
Multivariate time series, diagnostic checking of <b>residuals</b> , following G13DCF		G13DSF
Multivariate time series, noise spectrum, bounds, impulse <b>response</b> function and its standard error		G13CGF
Real sparse nonsymmetric linear systems, preconditioned <b>RGMRES</b> , CGS, Bi-CGSTAB or TFQMR method		F11BEF
Complex sparse non-Hermitian linear systems, preconditioned <b>RGMRES</b> , CGS, Bi-CGSTAB or TFQMR method		F11BSF
Solution of complex sparse non-Hermitian linear system, <b>RGMRES</b> , CGS, Bi-CGSTAB or TFQMR method, Jacobi or...		F11DSF
Solution of complex sparse non-Hermitian linear system, <b>RGMRES</b> , CGS, Bi-CGSTAB or TFQMR method,...		F11DQF
Real sparse nonsymmetric linear systems, preconditioned <b>RGMRES</b> , CGS or Bi-CGSTAB		F11BBF
Solution of real sparse nonsymmetric linear system, <b>RGMRES</b> , CGS or Bi-CGSTAB method, Jacobi or...		F11DEF
Solution of real sparse nonsymmetric linear system, <b>RGMRES</b> , CGS or Bi-CGSTAB method,...		F11DCF
Roe's approximate <b>Riemann</b> solver for Euler equations in conservative form,...		D03PUF
Osher's approximate <b>Riemann</b> solver for Euler equations in conservative form,...		D03PVF
Modified HLL <b>Riemann</b> solver for Euler equations in conservative form,...		D03PWF
Exact <b>Riemann</b> Solver for Euler equations in conservative form,...		D03PXF
...scheme using numerical flux function based on <b>Riemann</b> solver, one space variable		D03PFF
...scheme using numerical flux function based on <b>Riemann</b> solver, one space variable		D03PLF
...scheme using numerical flux function based on <b>Riemann</b> solver, remeshing, one space variable		D03PSF
	Selected <b>right</b> and/or left eigenvectors of complex upper Hessenberg matrix...	F08PXF
	Selected <b>right</b> and/or left eigenvectors of real upper Hessenberg matrix...	F08PKF
	Left and <b>right</b> eigenvectors of complex upper triangular matrix	F08QXF
	Left and <b>right</b> eigenvectors of real upper quasi-triangular matrix	F08QKF
...factorization of real matrix, form orthonormal basis of <b>right</b> invariant subspace for selected eigenvalues,...		F08QGF
...of complex matrix, form orthonormal basis of <b>right</b> invariant subspace for selected eigenvalues,...		F08QUF
Regression using ranks, <b>right-censored</b> data		G08RBF
	Creates the <b>risk</b> sets associated with the Cox proportional hazards model...	G12ZAF
	<b>Robust</b> confidence intervals, one-sample	G07EAF
	<b>Robust</b> confidence intervals, two-sample	G07EBF
	<b>Robust</b> estimation, median, median absolute deviation,...	G07DAF
	<b>Robust</b> estimation, $M$ -estimates for location and scale...	G07DBF
	<b>Robust</b> estimation, $M$ -estimates for location and scale...	G07DCF
Calculates a <b>robust</b> estimation of a correlation matrix, Huber's weight function		G02HKF
Calculates a <b>robust</b> estimation of a correlation matrix, user-supplied weight...		G02HMF
Calculates a <b>robust</b> estimation of a correlation matrix, user-supplied weight...		G02HLF
<b>Robust</b> regression, compute regression with user-supplied functions...		G02HDF
<b>Robust</b> regression, compute weights for use with G02HDF		G02HBF
<b>Robust</b> regression, standard $M$ -estimates		G02HAF
<b>Robust</b> regression, variance-covariance matrix following G02HDF		G02HFF
Robust estimation, median, median absolute deviation, <b>robust</b> standard deviation		G07DAF
	Roe's approximate <b>Riemann</b> solver for Euler equations in...	D03PUF
...iteration of Kalman filter, time-varying, square <b>root</b> covariance filter		G13EAF
...iteration of Kalman filter, time-invariant, square <b>root</b> covariance filter		G13EBF
Compute square <b>root</b> of $(a^2 + b^2)$ , real $a$ and $b$		F06BNF
Square <b>root</b> of complex number		A02AAF
ODEs, IVP, <b>root-finding</b> diagnostics for D02QFF and D02QGF		D02QYF
ODEs, IVP, Adams method with <b>root-finding</b> (forward communication, comprehensive)		D02QFF
ODEs, IVP, Adams method with <b>root-finding</b> (reverse communication, comprehensive)		D02QGF
All eigenvalues of real symmetric tridiagonal matrix, <b>root-free</b> variant of $QL$ or $QR$		F08JFF
	Generate real plane <b>rotation</b>	F06AAF
Generate real Jacobi plane <b>rotation</b>		F06BEF
Apply real plane <b>rotation</b>		F06EPF

Apply complex plane <b>rotation</b>	F06HPF
Generate real plane <b>rotation</b> , storing tangent	F06BAF
Generate complex plane <b>rotation</b> , storing tangent, real cosine	F06CAF
Generate complex plane <b>rotation</b> , storing tangent, real sine	F06CBF
Apply complex similarity <b>rotation</b> to 2 by 2 Hermitian matrix	F06CHF
Apply real similarity <b>rotation</b> to 2 by 2 symmetric matrix	F06BHF
Apply real plane <b>rotation</b> to two complex vectors	F06KPF
Apply plane <b>rotation</b> to two real sparse vectors	F06EXF
Apply real symmetric plane <b>rotation</b> to two vectors	F06FFP
Generate sequence of real plane <b>rotations</b>	F06FQF
Generate sequence of complex plane <b>rotations</b>	F06HQF
...real symmetric matrix as a sequence of plane <b>rotations</b>	F06QMF
...real upper triangular, $Z$ a sequence of plane <b>rotations</b>	F06QTF
...transformation of Hermitian matrix as a sequence of plane <b>rotations</b>	F06TMF
...complex upper triangular, $Z$ a sequence of plane <b>rotations</b>	F06TTF
Computes Procrustes <b>rotations</b>	G03BCF
Apply sequence of plane <b>rotations</b> , complex rectangular matrix, complex cosine and real sine	F06TYF
Apply sequence of plane <b>rotations</b> , complex rectangular matrix, real cosine and complex sine	F06TXF
Apply sequence of plane <b>rotations</b> , complex rectangular matrix, real cosine and sine	F06VXF
<b>QR</b> or <b>RQ</b> factorization by sequence of plane <b>rotations</b> , complex upper Hessenberg matrix	F06TRF
<b>QR</b> or <b>RQ</b> factorization by sequence of plane <b>rotations</b> , complex upper spiked matrix	F06TSF
Compute upper Hessenberg matrix by sequence of plane <b>rotations</b> , complex upper triangular matrix	F06TVF
Compute upper spiked matrix by sequence of plane <b>rotations</b> , complex upper triangular matrix	F06TWF
<b>QRxk</b> factorization by sequence of plane <b>rotations</b> , complex upper triangular matrix augmented by a full row	F06TQF
Computes orthogonal <b>rotations</b> for loading matrix, generalized orthomax criterion	G03BAF
<b>QR</b> factorization by sequence of plane <b>rotations</b> , rank-1 update of complex upper triangular matrix	F06TPF
<b>QR</b> factorization by sequence of plane <b>rotations</b> , rank-1 update of real upper triangular matrix	F06QPF
Apply sequence of plane <b>rotations</b> , real rectangular matrix	F06QXF
<b>QR</b> or <b>RQ</b> factorization by sequence of plane <b>rotations</b> , real upper Hessenberg matrix	F06BRF
<b>QR</b> or <b>RQ</b> factorization by sequence of plane <b>rotations</b> , real upper spiked matrix	F06QSF
Compute upper Hessenberg matrix by sequence of plane <b>rotations</b> , real upper triangular matrix	F06QVF
Compute upper spiked matrix by sequence of plane <b>rotations</b> , real upper triangular matrix	F06QWF
<b>QR</b> factorization by sequence of plane <b>rotations</b> , real upper triangular matrix augmented by a full row	F06QQF
Allocates observations to groups according to selected <b>rules</b> (for use after G03DAF)	G03DCF
Calculation of weights and abscissae for Gaussian quadrature <b>rules</b> , general choice of rule	D01BCF
Pre-computed weights and abscissae for Gaussian quadrature <b>rules</b> , restricted choice of rule	D01BBF
ODEs, IVP, <b>Runge-Kutta</b> method, integration over one step	D02PDF
ODEs, IVP, <b>Runge-Kutta</b> method, integration over range with output	D02PCF
ODEs, IVP, <b>Runge-Kutta</b> method, until function of solution is zero,...	D02BJF
ODEs, IVP, <b>Runge-Kutta-Merson</b> method, until a component attains given...	D02BGF
ODEs, IVP, <b>Runge-Kutta-Merson</b> method, until function of solution is zero...	D02BHF
Second-order ODEs, IVP, <b>Runge-Kutta-Nystrom</b> method	D02LAF
Compute smoothed data sequence using <b>running</b> median smoothers	G10CAF
Performs the runs up or <b>runs</b> down test for randomness	G08EAF
Performs the <b>runs</b> up or <b>runs</b> down test for randomness	G08EAF
Fresnel integral $S(x)$	S20ACF
The <b>safe range</b> parameter	X02AMF
The <b>safe range</b> parameter for complex floating-point arithmetic	X02ANF
Multi-dimensional quadrature, <b>Sag-Szekeres</b> method, general product region or $n$ -sphere	D01DFD
Robust confidence intervals, one- <b>sample</b>	G07EAF
Robust confidence intervals, two- <b>sample</b>	G07EBF
...Mann-Whitney $U$ statistic, no ties in pooled <b>sample</b>	G08AJF
...the Mann-Whitney $U$ statistic, ties in pooled <b>sample</b>	G08AKF
Univariate time series, <b>sample</b> autocorrelation function	G13ABF
Multivariate time series, smoothed <b>sample</b> cross spectrum using rectangular, Bartlett, Tukey or...	G13CCF
Multivariate time series, smoothed <b>sample</b> cross spectrum using spectral smoothing by...	G13CDF
Multivariate time series, <b>sample</b> cross-correlation or cross-covariance matrices	G13DMF
Pseudo-random <b>sample</b> from an integer vector	G05EJF
Computes probabilities for the one- <b>sample</b> Kolmogorov-Smirnov distribution	G01EYF
Computes probabilities for the two- <b>sample</b> Kolmogorov-Smirnov distribution	G01EZF
Performs the two- <b>sample</b> Kolmogorov-Smirnov test	G08CDF
Performs the one- <b>sample</b> Kolmogorov-Smirnov test for a user-supplied distribution	G08CCF
Performs the one- <b>sample</b> Kolmogorov-Smirnov test for standard distributions	G08CBF
Performs the Wilcoxon one- <b>sample</b> (matched pairs) signed rank test	G08AGF
Multivariate time series, <b>sample</b> partial lag correlation matrices, $\chi^2$ statistics and...	G13DNF
Univariate time series, smoothed <b>sample</b> spectrum using rectangular, Bartlett, Tukey or...	G13CAF
Univariate time series, smoothed <b>sample</b> spectrum using spectral smoothing by...	G13CBF
Computes a trimmed and winsorized mean of a single <b>sample</b> with estimates of their variance	G07DDF
Sign test on two paired <b>samples</b>	G08AAF
Friedman two-way analysis of variance on $k$ matched <b>samples</b>	G08AEF
Performs the Mann-Whitney $U$ test on two independent <b>samples</b>	G08AHF
Median test on two <b>samples</b> of unequal size	G08ACF
Kruskal-Wallis one-way analysis of variance on $k$ <b>samples</b> of unequal size	G08AFF
Mood's and David's tests on two <b>samples</b> of unequal size	G08BAF
Ranks, Normal scores, approximate Normal scores or exponential ( <b>Savage</b> ) scores	G01DHF
Multiply real vector by <b>scalar</b>	F06EDF
Multiply complex vector by complex <b>scalar</b>	F06GDF
Multiply complex vector by real <b>scalar</b>	F06JDF
Broadcast <b>scalar</b> into complex vector	F06HBF
Broadcast <b>scalar</b> into integer vector	F06DBF
Broadcast <b>scalar</b> into real vector	F06FBF
Multiply real vector by <b>scalar</b> , preserving input vector	F06FDF
Multiply complex vector by complex <b>scalar</b> , preserving input vector	F06HDF
Multiply complex vector by real <b>scalar</b> , preserving input vector	F06KDF
Add <b>scalar</b> times complex sparse vector to complex sparse vector	F06GTF
Add <b>scalar</b> times complex vector to complex vector	F06GCF
Add <b>scalar</b> times real sparse vector to real sparse vector	F06ETF
Add <b>scalar</b> times real vector to real vector	F06ECF
Compute quotient of two real <b>scalars</b> , with overflow flag	F06BLF
Compute quotient of two complex <b>scalars</b> , with overflow flag	F06CLF
Robust estimation, $M$ -estimates for location and <b>scale</b> parameters, standard weight functions	G07DBF
Robust estimation, $M$ -estimates for location and <b>scale</b> parameters, user-defined weight functions	G07DCF
Scaled complex complement of error function, $\exp(-z^2)\operatorname{erfc}(-iz)$	S15DDF
Scaled derivatives of $\psi(x)$	S14ADF
Compute Euclidean norm from <b>scaled</b> form	F06BMF
Update Euclidean norm of real vector in <b>scaled</b> form	F06JFJ
Update Euclidean norm of complex vector in <b>scaled</b> form	F06KJF
Performs principal co-ordinate analysis, classical metric <b>scaling</b>	G03FAF
Performs non-metric (ordinal) multidimensional <b>scaling</b>	G03FCF
Sum or difference of two real matrices, optional <b>scaling</b> and transposition	F01CTF

Sum or difference of two complex matrices, optional	<b>scaling</b> and transposition	F01CWF
	<b>Scatter</b> complex sparse vector	F06GWF
	<b>Scatter</b> real sparse vector	F06EWF
...bicubic splines with automatic knot placement,	<b>scattered</b> data	E02DDF
Lineprinter	<b>scatterplot</b> of one variable against Normal scores	G01AHF
Lineprinter	<b>scatterplot</b> of two variables	G01AGF
	Gram– <b>Schmidt</b> orthogonalisation of $n$ vectors of order $m$	F05AAF
All eigenvalues and	<b>Schur</b> factorization of complex general matrix (Black Box)	F02GAF
	Reorder <b>Schur</b> factorization of complex matrix, form orthonormal basis...	F08QUF
	Reorder <b>Schur</b> factorization of complex matrix using unitary...	F08QTF
	Eigenvalues and <b>Schur</b> factorization of complex upper Hessenberg matrix...	F08PSF
All eigenvalues and	<b>Schur</b> factorization of real general matrix (Black Box)	F02EAF
	Reorder <b>Schur</b> factorization of real matrix, form orthonormal basis...	F08QGF
	Reorder <b>Schur</b> factorization of real matrix using orthogonal...	F08QFF
	Eigenvalues and <b>Schur</b> factorization of real upper Hessenberg matrix...	F08PEF
	Computes factor <b>score</b> coefficients (for use after G03CAF)	G03CCF
Lineprinter	scatterplot of one variable against Normal <b>scores</b>	G01AHF
...approximate Normal scores or exponential (Savage)	<b>scores</b>	G01DHF
	Normal <b>scores</b> , accurate values	G01DAF
	Ranks, Normal <b>scores</b> , approximate Normal scores or exponential (Savage) scores	G01DHF
	Normal <b>scores</b> , approximate values	G01DBF
	Normal <b>scores</b> , approximate variance-covariance matrix	G01DCF
	Produces standardized values ( <b>z-scores</b> ) for a data matrix	G03ZAF
	Ranks, Normal scores, approximate Normal <b>scores</b> or exponential (Savage) scores	G01DHF
...algorithm, from given starting value, binary	<b>search</b> for interval	C05AGF
	Binary <b>search</b> for interval containing zero of continuous function...	C05AVF
	Univariate time series, <b>seasonal</b> and non-seasonal differencing	G13AAF
Univariate time series, preliminary estimation,	<b>seasonal</b> ARIMA model	G13ADF
Univariate time series, state set and forecasts, from fully specified	<b>seasonal</b> ARIMA model	G13AJF
	Univariate time series, estimation, <b>seasonal</b> ARIMA model (comprehensive)	G13AEF
	Univariate time series, estimation, <b>seasonal</b> ARIMA model (easy-to-use)	G13AFF
	Univariate time series, seasonal and non- <b>seasonal</b> differencing	G13AAF
	<b>Selected</b> eigenvalues and eigenvectors of complex Hermitian...	F02HCF
	<b>Selected</b> eigenvalues and eigenvectors of complex nonsymmetric...	F02GCF
Estimates of sensitivities of	<b>selected</b> eigenvalues and eigenvectors of complex upper triangular...	F08QYF
	<b>Selected</b> eigenvalues and eigenvectors of real nonsymmetric...	F02ECF
	<b>Selected</b> eigenvalues and eigenvectors of real symmetric...	F02FCF
Estimates of sensitivities of	<b>selected</b> eigenvalues and eigenvectors of real upper quasi-triangular...	F08QLF
	<b>Selected</b> eigenvalues and eigenvectors of sparse symmetric...	F02JF
	<b>Selected</b> eigenvalues of real symmetric tridiagonal matrix by...	F08JF
...orthonormal basis of right invariant subspace for	<b>selected</b> eigenvalues, with estimates of sensitivities	F08QGF
...orthonormal basis of right invariant subspace for	<b>selected</b> eigenvalues, with estimates of sensitivities	F08QUF
	<b>Selected</b> eigenvectors of real symmetric tridiagonal matrix by...	F08JXF
	<b>Selected</b> eigenvectors of real symmetric tridiagonal matrix by...	F08JF
	<b>Selected</b> right and/or left eigenvectors of complex upper...	F08PXF
	<b>Selected</b> right and/or left eigenvectors of real upper...	F08PKF
Allocates observations to groups according to	<b>selected</b> rules (for use after G03DAF)	G03DCF
Computes multiway table from set of classification factors using	<b>selected</b> statistic	G11BAF
One-dimensional quadrature, adaptive, infinite or	<b>semi-infinite</b> interval	D01AMF
One-dimensional quadrature, adaptive,	<b>semi-infinite</b> interval, weight function $\cos(\omega x)$ or $\sin(\omega x)$	D01ASF
...selected eigenvalues, with estimates of	<b>sensitivities</b>	F08QGF
...subspace for selected eigenvalues, with estimates of	<b>sensitivities</b>	F08QUF
	Estimates of <b>sensitivities</b> of selected eigenvalues and eigenvectors of...	F08QYF
	Estimates of <b>sensitivities</b> of selected eigenvalues and eigenvectors of...	F08QLF
	Complex conjugate of Hermitian <b>sequence</b>	C06GBF
	Complex conjugate of complex <b>sequence</b>	C06CCF
Initialise random number generating routines to give repeatable	<b>sequence</b>	G05CBF
...number generating routines to give non-repeatable	<b>sequence</b>	G05CCF
	Generate <b>sequence</b> of complex plane rotations	F06HQF
Orthogonal similarity transformation of real symmetric matrix as a	<b>sequence</b> of plane rotations	F06QMF
...factorization of $ZU$ , $U$ real upper triangular, $Z$ a	<b>sequence</b> of plane rotations	F06QTF
Unitary similarity transformation of Hermitian matrix as a	<b>sequence</b> of plane rotations	F06TMF
...of $ZU$ , $U$ complex upper triangular, $Z$ a	<b>sequence</b> of plane rotations	F06TTF
	Apply <b>sequence</b> of plane rotations, complex rectangular matrix,...	F06TYF
	Apply <b>sequence</b> of plane rotations, complex rectangular matrix,...	F06TXF
	Apply <b>sequence</b> of plane rotations, complex rectangular matrix,...	F06VXF
$QR$ or $RQ$ factorization by	<b>sequence</b> of plane rotations, complex upper Hessenberg matrix	F06TRF
$QR$ or $RQ$ factorization by	<b>sequence</b> of plane rotations, complex upper spiked matrix	F06TSF
Compute upper Hessenberg matrix by	<b>sequence</b> of plane rotations, complex upper triangular matrix	F06TVF
Compute upper spiked matrix by	<b>sequence</b> of plane rotations, complex upper triangular matrix	F06TWf
$QRxk$ factorization by	<b>sequence</b> of plane rotations, complex upper triangular matrix...	F06TQF
$QR$ factorization by	<b>sequence</b> of plane rotations, rank-1 update of complex upper...	F06TPF
$QR$ factorization by	<b>sequence</b> of plane rotations, rank-1 update of real upper...	F06QPF
	Apply <b>sequence</b> of plane rotations, real rectangular matrix	F06QXF
$QR$ or $RQ$ factorization by	<b>sequence</b> of plane rotations, real upper Hessenberg matrix	F06QRF
$QR$ or $RQ$ factorization by	<b>sequence</b> of plane rotations, real upper spiked matrix	F06QSF
Compute upper Hessenberg matrix by	<b>sequence</b> of plane rotations, real upper triangular matrix	F06QVF
Compute upper spiked matrix by	<b>sequence</b> of plane rotations, real upper triangular matrix	F06QWF
$QR$ factorization by	<b>sequence</b> of plane rotations, real upper triangular matrix...	F06QQF
	Generate <b>sequence</b> of real plane rotations	F06QF
Acceleration of convergence of	<b>sequence</b> , Shanks' transformation and epsilon algorithm	C06BAF
Compute smoothed data	<b>sequence</b> using running median smoothers	G10CAF
	Complex conjugate of multiple Hermitian <b>sequences</b>	C06GQF
Convert Hermitian sequences to general complex	<b>sequences</b>	C06GSF
...transform, using complex data format for Hermitian	<b>sequences</b>	C06PAF
	Convert Hermitian <b>sequences</b> to general complex sequences	C06GSF
Minimum, function of several variables,	<b>sequential</b> QP method, nonlinear constraints, using function values...	E04UCF
Minimum, function of several variables,	<b>sequential</b> QP method, nonlinear constraints, using function values...	E04UHF
Minimum of a sum of squares, nonlinear constraints,	<b>sequential</b> QP method, using function values...	E04UNF
	Performs the pairs ( <b>serial</b> ) test for randomness	G08EBF
	Creates the risk <b>sets</b> associated with the Cox proportional hazards model...	G12ZAF
Elliptic PDE, solution of finite difference equations by SIP for	<b>seven-point</b> three-dimensional molecule, iterate to convergence	D03ECF
Elliptic PDE, solution of finite difference equations by SIP,	<b>seven-point</b> three-dimensional molecule, one iteration	D03UBF
Acceleration of convergence of sequence,	<b>Shanks'</b> transformation and epsilon algorithm	C06BAF
	<b>Shapiro</b> and Wilk's $W$ test for Normality	G01DDF
Interpolating functions, modified	<b>Shepard's</b> method, two variables	E01SEF

Interpolating functions, modified <b>Shepard's method</b> , two variables	E01SGF
ODEs, boundary value problem, <b>shooting</b> and matching, boundary values to be determined	D02HAF
ODEs, boundary value problem, <b>shooting</b> and matching, general parameters to be determined	D02HBF
ODEs, boundary value problem, <b>shooting</b> and matching technique, allowing interior matching point,...	D02AGF
ODEs, boundary value problem, <b>shooting</b> and matching technique, subject to extra algebraic	D02SAF
<b>Shortest path problem</b> , Dijkstra's algorithm	H03ADF
<b>Sign test</b> on two paired samples	G08AAF
Performs the Wilcoxon one-sample (matched pairs) <b>signed rank test</b>	G08AGF
...correlation matrices, $\chi^2$ statistics and <b>significance levels</b>	G13DNF
Computes bounds for the <b>significance</b> of a Durbin-Watson statistic	G01EPF
Apply complex <b>similarity</b> rotation to 2 by 2 Hermitian matrix	F06CHF
Apply real <b>similarity</b> rotation to 2 by 2 symmetric matrix	F06BHF
Reorder Schur factorization of real matrix using orthogonal <b>similarity</b> transformation	F08QHF
Reorder Schur factorization of complex matrix using unitary <b>similarity</b> transformation	F08QTF
Unitary <b>similarity</b> transformation of Hermitian matrix as a sequence...	F06TMF
Orthogonal <b>similarity</b> transformation of real symmetric matrix as a sequence...	F06QMF
Multi-dimensional quadrature over an <b>n-simplex</b>	D01PAF
Unconstrained minimum, <b>simplex</b> algorithm, function of several variables using...	E04CCF
Solution of real sparse <b>simultaneous</b> linear equations (coefficient matrix already factorized)	F04AXF
Solution of real tridiagonal <b>simultaneous</b> linear equations (coefficient matrix already factorized...	F04LEF
Solution of real almost block diagonal <b>simultaneous</b> linear equations (coefficient matrix already factorized...	F04LHF
Solution of real symmetric positive-definite variable-bandwidth <b>simultaneous</b> linear equations (coefficient matrix already factorized...	F04MCF
Solution of real symmetric positive-definite <b>simultaneous</b> linear equations (coefficient matrix already factorized...	F04AGF
Solution of real <b>simultaneous</b> linear equations (using iterative refinement...	F04JF
Solution of real <b>simultaneous</b> linear equations, one right-hand side (Black Box)	F04ARF
Solution of real tridiagonal <b>simultaneous</b> linear equations, one right-hand side (Black Box)	F04EAF
Solution of real symmetric positive-definite tridiagonal <b>simultaneous</b> linear equations, one right-hand side (Black Box)	F04FAF
Solution of real symmetric positive-definite <b>simultaneous</b> linear equations, one right-hand side using...	F04ASF
Solution of real <b>simultaneous</b> linear equations, one right-hand side using...	F04ATF
Solution of real symmetric positive-definite <b>simultaneous</b> linear equations using iterative refinement...	F04AF
Solution of real <b>simultaneous</b> linear equations using iterative refinement...	F04AHF
Solution of real symmetric positive-definite banded <b>simultaneous</b> linear equations with multiple right-hand sides...	F04AAF
Solution of real symmetric positive-definite <b>simultaneous</b> linear equations with multiple right-hand sides...	F04ACF
Solution of real symmetric positive-definite <b>simultaneous</b> linear equations with multiple right-hand sides...	F04ADF
Solution of real symmetric positive-definite <b>simultaneous</b> linear equations with multiple right-hand sides using...	F04ABF
Solution of real <b>simultaneous</b> linear equations with multiple right-hand sides using...	F04AEF
The largest permissible argument for <b>sin</b> and <b>cos</b>	X02AHF
Generate complex plane rotation, storing tangent, real <b>sine</b>	F06CBF
Recover cosine and sine from given complex tangent, real <b>sine</b>	F06CDF
...complex rectangular matrix, real cosine and complex <b>sine</b>	F06TXF
...complex rectangular matrix, complex cosine and real <b>sine</b>	F06TYF
...rotations, complex rectangular matrix, real cosine and <b>sine</b>	F06VXF
Recover cosine and <b>sine</b> from given complex tangent, real cosine	F06CCF
Recover cosine and <b>sine</b> from given complex tangent, real sine	F06CDF
Recover cosine and <b>sine</b> from given real tangent	F06BCF
<b>Sine</b> integral $Si(x)$	S13ADF
Discrete <b>sine</b> transform	C06HAF
Discrete quarter-wave <b>sine</b> transform	C06HCF
Discrete <b>sine</b> transform (easy-to-use)	C06RAF
Discrete quarter-wave <b>sine</b> transform (easy-to-use)	C06RCF
Nonlinear convolution Volterra-Abel equation, second kind, weakly <b>singular</b>	D05BDF
Nonlinear convolution Volterra-Abel equation, first kind, weakly <b>singular</b>	D05BEF
Generate weights for use in solving weakly <b>singular</b> Abel-type equations	D05BYF
Linear non- <b>singular</b> Fredholm integral equation, second kind, smooth kernel	D05ABF
Linear non- <b>singular</b> Fredholm integral equation, second kind, split kernel	D05AAF
Second-order Sturm-Liouville problem, regular/ <b>singular</b> system, finite/infinite range, eigenvalue and...	D02KEF
Second-order Sturm-Liouville problem, regular/ <b>singular</b> system, finite/infinite range, eigenvalue only,...	D02KDF
One-dimensional quadrature, adaptive, finite interval, allowing for <b>singularities</b> at user-specified break-points	D01ALF
...finite interval, weight function with end-point <b>singularities</b> of algebraico-logarithmic type	D01APF
$\sinh x$	S10ABF
Elliptic PDE, solution of finite difference equations by <b>SIP</b> , five-point two-dimensional molecule, iterate to convergence	D03EBF
Elliptic PDE, solution of finite difference equations by <b>SIP</b> , five-point two-dimensional molecule, one iteration	D03UAF
Elliptic PDE, solution of finite difference equations by <b>SIP</b> for seven-point three-dimensional molecule, iterate to convergence	D03ECF
Elliptic PDE, solution of finite difference equations by <b>SIP</b> , seven-point three-dimensional molecule, one iteration	D03UBF
Mean, variance, <b>skewness</b> , kurtosis, etc, one variable, from frequency table	G01ADF
Mean, variance, <b>skewness</b> , kurtosis, etc, one variable, from raw data	G01AAF
Mean, variance, <b>skewness</b> , kurtosis, etc, two variables, from raw data	G01ABF
Elements of real vector with largest and <b>smallest</b> absolute value	F06FLF
The <b>smallest</b> positive model number	X02AKF
Computes probabilities for the one-sample Kolmogorov- <b>Smirnov</b> distribution	G01EYF
Computes probabilities for the two-sample Kolmogorov- <b>Smirnov</b> distribution	G01EZF
Performs the two-sample Kolmogorov- <b>Smirnov</b> test	G08CDF
Performs the one-sample Kolmogorov- <b>Smirnov</b> test for a user-supplied distribution	G08CCF
Performs the one-sample Kolmogorov- <b>Smirnov</b> test for standard distributions	G08CBF
Linear non-singular Fredholm integral equation, second kind, <b>smooth</b> kernel	D05ABF
Compute <b>smoothed</b> data sequence using running median smoothers	G10CAF
Multivariate time series, <b>smoothed</b> sample cross spectrum using rectangular, Bartlett,...	G13CCF
Multivariate time series, <b>smoothed</b> sample cross spectrum using spectral smoothing by...	G13CDF
Univariate time series, <b>smoothed</b> sample spectrum using rectangular, Bartlett,...	G13CAF
Univariate time series, <b>smoothed</b> sample spectrum using spectral smoothing by...	G13CBF
Compute smoothed data sequence using running median <b>smoothers</b>	G10CAF
Univariate time series, smoothed sample spectrum using spectral <b>smoothing</b> by the trapezium frequency (Daniell) window	G13CBF
...smoothed sample cross spectrum using spectral <b>smoothing</b> by the trapezium frequency (Daniell) window	G13CDF
Fit cubic smoothing spline, <b>smoothing</b> parameter estimated	G10ACF
Fit cubic smoothing spline, <b>smoothing</b> parameter given	G10ABF
Fit cubic <b>smoothing</b> spline, smoothing parameter estimated	G10ACF
Fit cubic <b>smoothing</b> spline, smoothing parameter given	G10ABF
Jacobian elliptic functions <b>sn</b> , <b>cn</b> and <b>dn</b>	S21CAF
<b>Soft fail</b>	P01
<b>Sort</b> a vector, character data	M01CCF
<b>Sort</b> a vector, integer numbers	M01CBF
<b>Sort</b> a vector, real numbers	M01CAF
<b>Sort</b> two-dimensional data into panels for fitting bicubic splines	E02ZAF

Solution of complex <b>sparse</b> Hermitian linear system, conjugate gradient/Lanczos...	F11JSF
Solution of complex <b>sparse</b> Hermitian linear system, conjugate gradient/Lanczos...	F11JQF
...matrix generated by applying SSOR to complex <b>sparse</b> Hermitian matrix	F11JRF
Complex <b>sparse</b> Hermitian matrix, incomplete Cholesky factorization	F11JNF
Complex <b>sparse</b> Hermitian matrix reorder routine	F11ZPF
Complex <b>sparse</b> Hermitian matrix vector multiply	F11XSF
Explicit ODEs, stiff IVP, <b>sparse</b> Jacobian (comprehensive)	D02NDF
Implicit/algebraic ODEs, stiff IVP, <b>sparse</b> Jacobian (comprehensive)	D02NJF
ODEs, IVP, for use with D02M-N routines, <b>sparse</b> Jacobian, enquiry routine	D02NRF
ODEs, IVP, <b>sparse</b> Jacobian, linear algebra diagnostics, for use with D02M-N...	D02NXF
ODEs, IVP, for use with D02M-N routines, <b>sparse</b> Jacobian, linear algebra set-up	D02NUF
<b>Sparse</b> linear least-squares problem, $m$ real equations in $n$ unknowns	F04QAF
<i>LU</i> factorization of real <b>sparse</b> matrix	F01BRF
<i>LU</i> factorization of real <b>sparse</b> matrix with known sparsity pattern	F01BSF
Complex <b>sparse</b> non-Hermitian linear systems, preconditioned RGMRES,...	F11BSF
Solution of complex <b>sparse</b> non-Hermitian linear system, RGMRES, CGS,...	F11DSF
Solution of complex <b>sparse</b> non-Hermitian linear system, RGMRES, CGS,...	F11DQF
Complex <b>sparse</b> non-Hermitian linear systems, diagnostic for F11BSF	F11BTF
Complex <b>sparse</b> non-Hermitian linear systems, incomplete <i>LU</i> factorization	F11DNF
Complex <b>sparse</b> non-Hermitian linear systems, set-up for F11BSF	F11BRF
...matrix generated by applying SSOR to complex <b>sparse</b> non-Hermitian matrix	F11DRF
Complex <b>sparse</b> non-Hermitian matrix reorder routine	F11ZNF
Complex <b>sparse</b> non-Hermitian matrix vector multiply	F11XNF
Solution of real <b>sparse</b> nonsymmetric linear system, RGMRES, CGS or...	F11DEF
Solution of real <b>sparse</b> nonsymmetric linear system, RGMRES, CGS or...	F11DCF
Real <b>sparse</b> nonsymmetric linear systems, diagnostic for F11BBF	F11BCF
Real <b>sparse</b> nonsymmetric linear systems, diagnostic for F11BEF	F11BBF
Real <b>sparse</b> nonsymmetric linear systems, incomplete <i>LU</i> factorization	F11DAF
Real <b>sparse</b> nonsymmetric linear systems, preconditioned RGMRES,...	F11BEF
Real <b>sparse</b> nonsymmetric linear systems, preconditioned RGMRES,...	F11BBF
Real <b>sparse</b> nonsymmetric linear systems, set-up for F11BBF	F11BAF
Real <b>sparse</b> nonsymmetric linear systems, set-up for F11BEF	F11BDF
...pre-conditioning matrix generated by applying SSOR to real <b>sparse</b> nonsymmetric matrix	F11DDF
Real <b>sparse</b> nonsymmetric matrix reorder routine	F11ZAF
Real <b>sparse</b> nonsymmetric matrix vector multiply	F11XAF
Solution of real <b>sparse</b> simultaneous linear equations (coefficient matrix...)	F04AXF
Selected eigenvalues and eigenvectors of <b>sparse</b> symmetric eigenproblem (Black Box)	F02FJF
Solution of real <b>sparse</b> symmetric linear system, conjugate gradient/Lanczos...	F11JEF
Solution of real <b>sparse</b> symmetric linear system, conjugate gradient/Lanczos...	F11JCF
Real <b>sparse</b> symmetric linear systems, diagnostic for F11GBF	F11GCF
Real <b>sparse</b> symmetric linear systems, pre-conditioned conjugate gradient...	F11GBF
Real <b>sparse</b> symmetric linear systems, set-up for F11GBF	F11GAF
...preconditioning matrix generated by applying SSOR to real <b>sparse</b> symmetric matrix	F11JDF
Real <b>sparse</b> symmetric matrix, incomplete Cholesky factorization	F11JAF
Real <b>sparse</b> symmetric matrix reorder routine	F11ZBF
Real <b>sparse</b> symmetric matrix vector multiply	F11XEF
Add scalar times real sparse vector to real <b>sparse</b> vector	F06ETF
Gather real <b>sparse</b> vector	F06EUF
Gather and set to zero real <b>sparse</b> vector	F06EVF
Scatter real <b>sparse</b> vector	F06EWF
Add scalar times complex sparse vector to complex <b>sparse</b> vector	F06GTF
Gather complex <b>sparse</b> vector	F06GUF
Gather and set to zero complex <b>sparse</b> vector	F06GVF
Scatter complex <b>sparse</b> vector	F06GWF
Dot product of two complex <b>sparse</b> vector, conjugated	F06GSF
Add scalar times complex <b>sparse</b> vector to complex sparse vector	F06GTF
Add scalar times real <b>sparse</b> vector to real sparse vector	F06ETF
Dot product of two complex <b>sparse</b> vector, unconjugated	F06GRF
Dot product of two real <b>sparse</b> vectors	F06ERF
Apply plane rotation to two real <b>sparse</b> vectors	F06EXF
<i>LU</i> factorization of real sparse matrix with known <b>sparsity</b> pattern	F01BSF
PDEs, <b>spatial</b> interpolation with D03PCF, D03PEF, D03PFF, D03PHF,...	D03PZF
PDEs, <b>spatial</b> interpolation with D03PDF or D03PJF	D03PYF
Kendall/ <b>Spearman</b> non-parametric rank correlation coefficients,...	G02BPF
Kendall/ <b>Spearman</b> non-parametric rank correlation coefficients,...	G02BRF
Kendall/ <b>Spearman</b> non-parametric rank correlation coefficients,...	G02BNF
Kendall/ <b>Spearman</b> non-parametric rank correlation coefficients,...	G02BQF
Kendall/ <b>Spearman</b> non-parametric rank correlation coefficients,...	G02BSF
Least-squares polynomial fit, <b>special</b> data points (including interpolation)	E02AFF
Approximation of <b>special</b> functions	S
...coherency, bounds, univariate and bivariate (cross) <b>spectra</b>	G13CEF
...phase, bounds, univariate and bivariate (cross) <b>spectra</b>	G13CFF
Univariate time series, smoothed sample spectrum using <b>spectral</b> smoothing by the trapezium frequency (Daniell) window	G13CBF
Multivariate time series, smoothed sample cross spectrum using <b>spectral</b> smoothing by the trapezium frequency (Daniell) window	G13CDF
Multivariate time series, noise <b>spectrum</b> , bounds, impulse response function and its standard error	G13CGF
Multivariate time series, cross amplitude <b>spectrum</b> , squared coherency, bounds, univariate and bivariate...	G13CEF
Univariate time series, smoothed sample <b>spectrum</b> using rectangular, Bartlett, Tukey or Parzen lag window	G13CAF
Multivariate time series, smoothed sample cross <b>spectrum</b> using rectangular, Bartlett, Tukey or Parzen lag window	G13CCF
Univariate time series, smoothed sample <b>spectrum</b> using spectral smoothing by the trapezium frequency...	G13CBF
Multivariate time series, smoothed sample cross <b>spectrum</b> using spectral smoothing by the trapezium frequency...	G13CDF
...Sag-Szekeres method, general product region or $n$ -sphere	D01DFD
Multi-dimensional quadrature over an $n$ -sphere, allowing for badly-behaved integrands	D01JAF
<i>QR</i> or <i>RQ</i> factorization by sequence of plane rotations, real upper <b>spiked</b> matrix	F06QSF
...by sequence of plane rotations, complex upper <b>spiked</b> matrix	F06TSF
Compute upper <b>spiked</b> matrix by sequence of plane rotations, complex...	F06TWF
Compute upper <b>spiked</b> matrix by sequence of plane rotations, real...	F06QWF
Evaluation of fitted bicubic <b>spline</b> at a mesh of points	E02DFD
Evaluation of fitted bicubic <b>spline</b> at a vector of points	E02DEF
Least-squares cubic <b>spline</b> curve fit, automatic knot placement	E02BEF
Interpolating functions, fitting bicubic <b>spline</b> , data on rectangular grid	E01DAF
Evaluation of fitted cubic <b>spline</b> , definite integral	E02BDF
Least-squares curve cubic <b>spline</b> fit (including interpolation)	E02BAF
Evaluation of fitted cubic <b>spline</b> , function and derivatives	E02BCF
Evaluation of fitted cubic <b>spline</b> , function only	E02BBF
Interpolating functions, cubic <b>spline</b> interpolant, one variable	E01BAF
Fit cubic smoothing <b>spline</b> , smoothing parameter estimated	G10ACF
Fit cubic smoothing <b>spline</b> , smoothing parameter given	G10ABF
<b>B-splines</b>	E02
Least-squares surface fit, bicubic <b>splines</b>	E02DAF
Sort two-dimensional data into panels for fitting bicubic <b>splines</b>	E02ZAF
Least-squares surface fit by bicubic <b>splines</b> with automatic knot placement, data on rectangular grid	E02DCF
Least-squares surface fit by bicubic <b>splines</b> with automatic knot placement, scattered data	E02DDF
Linear non-singular Fredholm integral equation, second kind, <b>split</b> kernel	D05AAF
<b>SPRINT</b> package	D02M-N

...one iteration of Kalman filter, time-varying,	<b>square</b> root covariance filter	G13EAF
...one iteration of Kalman filter, time-invariant,	<b>square</b> root covariance filter	G13EBF
	Compute <b>square</b> root of $(a^2 + b^2)$ , real $a$ and $b$	F06BNF
	<b>Square</b> root of complex number	A02AAF
Convert real matrix between packed triangular and	<b>square</b> storage schemes	F01ZAF
Convert complex matrix between packed triangular and	<b>square</b> storage schemes	F01ZBF
Multivariate time series, cross amplitude spectrum,	<b>squared</b> coherency, bounds, univariate and bivariate...	G13CEF
	Computes Mahalanobis <b>squared</b> distances for group or pooled variance-covariance...	G03DBF
	Multivariate time series, multiple <b>squared</b> partial autocorrelations	G13DBF
...boundary value problem, collocation and least-	<b>squares</b>	D02TGF
Check user's routine for calculating Hessian of a sum of	<b>squares</b>	E04YBF
Real general Gauss–Markov linear model (including weighted least-	<b>squares</b> )	F04JLF
...Gauss–Markov linear model (including weighted least-	<b>squares</b> )	F04KLF
Calculates $R^2$ and $C_P$ values from residual sums of	<b>squares</b>	G02ECF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and modified Newton algorithm...	E04GDF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and modified Newton algorithm...	E04GZF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and modified Newton algorithm...	E04FCF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and modified Newton algorithm...	E04FYF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and modified Newton algorithm...	E04HEF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and modified Newton algorithm...	E04HYF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and quasi-Newton algorithm...	E04GBF
	Unconstrained minimum of a sum of <b>squares</b> , combined Gauss–Newton and quasi-Newton algorithm...	E04GYF
	Least- <b>squares</b> cubic spline curve fit, automatic knot placement	E02BEF
	Least- <b>squares</b> cubic spline curve fit (including interpolation)	E02BAF
	Least- <b>squares</b> curve fit, by polynomials, arbitrary data points	E02ADF
	Computes residual sums of <b>squares</b> for all possible linear regressions for a set of...	G02EAF
	Computes sum of <b>squares</b> for contrast between means	G04DAF
	Least- <b>squares</b> (if rank = $n$ ) or minimal least- <b>squares</b> (if rank < $n$ )...	F04JGF
Least- <b>squares</b> (if rank = $n$ ) or minimal least- <b>squares</b> (if rank < $n$ ) solution of $m$ real equations in $n$ unknowns...		F04JGF
Computes a weighted sum of <b>squares</b> matrix		G02BUF
Computes a correlation matrix from a sum of <b>squares</b> matrix		G02BWF
	Update a weighted sum of <b>squares</b> matrix with a new observation	G02BTF
	Minimum of a sum of <b>squares</b> , nonlinear constraints, sequential QP method,...	E04UNF
	Least- <b>squares</b> polynomial fit, special data points (including interpolation)	E02AFF
	Least- <b>squares</b> polynomial fit, values and derivatives may be...	E02AGF
	Equality-constrained real linear least- <b>squares</b> problem	F04JMF
	Equality-constrained complex linear least- <b>squares</b> problem	F04KMF
Convex QP problem or linearly-constrained linear least- <b>squares</b> problem (dense)		E04NCF
	Sparse linear least- <b>squares</b> problem, $m$ real equations in $n$ unknowns	F04QAF
	Covariance matrix for nonlinear least- <b>squares</b> problem (unconstrained)	E04YCF
	Covariance matrix for linear least- <b>squares</b> problems, $m$ real equations in $n$ unknowns	F04YAF
ODEs, boundary value problem, collocation and least- <b>squares</b> , single $n$ th-order linear equation		D02JAF
	Least- <b>squares</b> solution of $m$ real equations in $n$ unknowns,...	F04AMF
	Minimal least- <b>squares</b> solution of $m$ real equations in $n$ unknowns,...	F04JAF
	Minimal least- <b>squares</b> solution of $m$ real equations in $n$ unknowns,...	F04JDF
	Least- <b>squares</b> surface fit, bicubic splines	E02DAF
	Least- <b>squares</b> surface fit by bicubic splines with automatic knot...	E02DCF
	Least- <b>squares</b> surface fit by bicubic splines with automatic knot...	E02DDF
	Least- <b>squares</b> surface fit by polynomials, data on lines	E02CAF
ODEs, boundary value problem, collocation and least- <b>squares</b> , system of first-order linear equations		D02JBF
...system, RGMRES, CGS or Bi-CGSTAB method, Jacobi or	<b>SSOR</b> preconditioner (Black Box)	F11DEF
...RGMRES, CGS, Bi-CGSTAB or TFQMR method, Jacobi or	<b>SSOR</b> preconditioner (Black Box)	F11DSF
...conjugate gradient/Lanczos method, Jacobi or	<b>SSOR</b> preconditioner (Black Box)	F11JEF
...conjugate gradient/Lanczos method, Jacobi or	<b>SSOR</b> preconditioner (Black Box)	F11JSF
...preconditioning matrix generated by applying	<b>SSOR</b> to complex sparse Hermitian matrix	F11JRF
...preconditioning matrix generated by applying	<b>SSOR</b> to complex sparse non-Hermitian matrix	F11DRF
...pre-conditioning matrix generated by applying	<b>SSOR</b> to real sparse nonsymmetric matrix	F11DDF
...preconditioning matrix generated by applying	<b>SSOR</b> to real sparse symmetric matrix	F11JDF
Performs the $\chi^2$ goodness of fit test, for	<b>standard</b> continuous distributions	G08CGF
Robust estimation, median, median absolute deviation, robust	<b>standard</b> deviation	G07DAF
Computes quantities needed for range-mean or	<b>standard</b> deviation-mean plot	G13AUF
Performs the one-sample Kolmogorov–Smirnov test for	<b>standard</b> distributions	G08CBF
...of a general linear regression model and its	<b>standard</b> error	G02DNF
Computes estimable function of a generalized linear model and its	<b>standard</b> error	G02GNF
...spectrum, bounds, impulse response function and its	<b>standard</b> error	G13CGF
...completely randomized design, treatment means and	<b>standard</b> errors	G04BBF
...general row and column design, treatment means and	<b>standard</b> errors	G04BCF
...complete factorial design, treatment means and	<b>standard</b> errors	G04CAF
Multivariate time series, forecasts and their	<b>standard</b> errors	G13DJF
Multivariate time series, updates forecasts and their	<b>standard</b> errors	G13DKF
	Estimates and <b>standard</b> errors of parameters of a general linear model...	G02GKF
	Estimates and <b>standard</b> errors of parameters of a general linear regression model...	G02DKF
...generalized eigenproblem $Ax = \lambda Bx$ to	<b>standard</b> form $Cy = \lambda y$ , such that $C$ has the same bandwidth as $A$	F08UEF
...generalized eigenproblem $Ax = \lambda Bx$ to	<b>standard</b> form $Cy = \lambda y$ , such that $C$ has the same bandwidth as $A$	F08USF
	Reduction to <b>standard</b> form, generalized real symmetric-definite banded...	F01BVF
	Reduction to <b>standard</b> form of complex Hermitian-definite generalized...	F08SSF
	Reduction to <b>standard</b> form of complex Hermitian-definite generalized...	F08TSF
	Reduction to <b>standard</b> form of real symmetric-definite generalized...	F08SEF
	Reduction to <b>standard</b> form of real symmetric-definite generalized...	F08TEF
	Robust regression, <b>standard</b> $M$ -estimates	G02HAF
Computes probabilities for the	<b>standard</b> Normal distribution	G01EAF
Computes deviates for the	<b>standard</b> Normal distribution	G01FAF
Robust estimation, $M$ -estimates for location and scale parameters,	<b>standard</b> weight functions	G07DBF
	Calculates <b>standardized</b> residuals and influence statistics	G02FAF
	Produces <b>standardized</b> values ( $z$ -scores) for a data matrix	G03ZAF
Computes probability for the Studentized range	<b>statistic</b>	G01EMF
Computes for the significance of a Durbin–Watson	<b>statistic</b>	G01EPF
Computes deviates for the Studentized range	<b>statistic</b>	G01FMF
Computes Durbin–Watson test	<b>statistic</b>	G02FCF
...set of classification factors using selected	<b>statistic</b>	G11BAF
Computes $t$ -test	<b>statistic</b> for a difference in means between two Normal populations,...	G07CAF
Computes test	<b>statistic</b> for equality of within-group covariance matrices and...	G03DAF
Computes the exact probabilities for the Mann–Whitney $U$	<b>statistic</b> , no ties in pooled sample	G08AJF
Computes the exact probabilities for the Mann–Whitney $U$	<b>statistic</b> , ties in pooled sample	G08AKF
	Order <b>statistics</b>	G01D
...quadratic forms in Normal variables, and related	<b>statistics</b>	G01NBF
Calculates standardized residuals and influence	<b>statistics</b>	G02FAF
Multivariate time series, sample partial lag correlation matrices, $\chi^2$	<b>statistics</b> and significance levels	G13DNF
	$\chi^2$ <b>statistics</b> for two-way contingency table	G11AAF
	Constructs a <b>stem</b> and leaf plot	G01ARF
Transportation problem, modified ‘stepping stone’ method		H03ABF
	Explicit ODEs, <b>stiff</b> IVP, banded Jacobian (comprehensive)	D02NCF
Implicit/algebraic ODEs, <b>stiff</b> IVP, banded Jacobian (comprehensive)		D02NHF
ODEs, <b>stiff</b> IVP, BDF method, until function of solution is zero,...		D02EJF
Explicit ODEs, <b>stiff</b> IVP, full Jacobian (comprehensive)		D02NBF

Implicit/algebraic ODEs, <b>stiff</b> IVP, full Jacobian (comprehensive)	D02NGF
Explicit ODEs, <b>stiff</b> IVP (reverse communication, comprehensive)	D02NMF
Implicit/algebraic ODEs, <b>stiff</b> IVP (reverse communication, comprehensive)	D02NNF
Explicit ODEs, <b>stiff</b> IVP, sparse Jacobian (comprehensive)	D02NDF
Implicit/algebraic ODEs, <b>stiff</b> IVP, sparse Jacobian (comprehensive)	D02NJF
Computes probability for the <b>Studentized</b> range statistic	G01EMF
Computes deviates for the <b>Studentized</b> range statistic	G01FMF
Computes probabilities for <b>Student's</b> <i>t</i> -distribution	G01EBF
Computes deviates for <b>Student's</b> <i>t</i> -distribution	G01FBF
Computes probabilities for the non-central <b>Student's</b> <i>t</i> -distribution	G01GBF
Pseudo-random real numbers, <b>Student's</b> <i>t</i> -distribution	G05DJF
Second-order <b>Sturm–Liouville</b> problem, regular system, finite range,...	D02KAF
Second-order <b>Sturm–Liouville</b> problem, regular/singular system,...	D02KEF
Second-order <b>Sturm–Liouville</b> problem, regular/singular system,...	D02KDF
Two-way analysis of variance, hierarchical classification, <b>subgroups</b> of unequal size	G04AGF
Basic Linear Algebra <b>Subprograms</b>	F06
<b>Sum</b> absolute values of complex vector elements	F06JKF
<b>Sum</b> absolute values of real vector elements	F06KEF
<b>Sum</b> of a Chebyshev series	C06DBF
Check user's routine for calculating Hessian of a <b>sum</b> of squares	E04YBF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and modified Newton...	E04GDF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and modified Newton...	E04GZF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and modified Newton...	E04FCF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and modified Newton...	E04FYF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and modified Newton...	E04HEF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and modified Newton...	E04HYF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and quasi-Newton...	E04GBF
Unconstrained minimum of a <b>sum</b> of squares, combined Gauss–Newton and quasi-Newton...	E04GYF
Computes <b>sum</b> of squares for contrast between means	G04DAF
Computes a weighted <b>sum</b> of squares matrix	G02BUF
Computes a correlation matrix from a <b>sum</b> of squares matrix	G02BWF
Update a weighted <b>sum</b> of squares matrix with a new observation	G02BTF
Minimum of a <b>sum</b> of squares, nonlinear constraints, sequential QP method,...	E04UNF
<b>Sum</b> or difference of two complex matrices,....	F01CWF
<b>Sum</b> or difference of two real matrices,....	F01CTF
Computes a five-point <b>summary</b> (median, hinges and extremes)	G01ALF
<b>Summation</b> of Series	C06
Calculates $R^2$ and $C_P$ values from residual <b>sums</b> of squares	G02ECF
Computes residual <b>sums</b> of squares for all possible linear regressions for...	G02EAF
Least-squares <b>surface</b> fit, bicubic splines	E02DAF
Least-squares <b>surface</b> fit by bicubic splines with automatic knot placement,...	E02DCF
Least-squares <b>surface</b> fit by bicubic splines with automatic knot placement,...	E02DDF
Least-squares <b>surface</b> fit by polynomials, data on lines	E02CAF
Computes Kaplan–Meier (product-limit) estimates of <b>survival</b> probabilities	G12AAF
QR factorization, possibly followed by <b>SVD</b>	F02WDF
<b>SVD</b> of complex matrix (Black Box)	F02XEF
<b>SVD</b> of complex upper triangular matrix (Black Box)	F02XUF
<b>SVD</b> of real bidiagonal matrix reduced from complex general matrix	F08MSF
<b>SVD</b> of real bidiagonal matrix reduced from real general matrix	F08MEF
<b>SVD</b> of real matrix (Black Box)	F02WEF
<b>SVD</b> of real upper triangular matrix (Black Box)	F02WUF
<b>Swap</b> two complex vectors	F06GGF
<b>Swap</b> two real vectors	F06EGF
Solve real <b>Sylvester</b> matrix equation $AX + XB = C$ , $A$ and $B$ are...	F08QHF
Solve complex <b>Sylvester</b> matrix equation $AX + XB = C$ , $A$ and $B$ are...	F08QVF
Matrix-vector product, real <b>symmetric</b> band matrix	F06PDF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real <b>symmetric</b> band matrix	F06REF
...Frobenius norm, largest absolute element, complex <b>symmetric</b> band matrix	F06UHF
Orthogonal reduction of real <b>symmetric</b> band matrix to symmetric tridiagonal form	F08HEF
All eigenvalues and optionally all eigenvectors of real <b>symmetric</b> band matrix, using divide and conquer	F08HCF
Selected eigenvalues and eigenvectors of sparse <b>symmetric</b> eigenproblem (Black Box)	F02JF
Bunch–Kaufman factorization of real <b>symmetric</b> indefinite matrix	F07MDF
Estimate condition number of real <b>symmetric</b> indefinite matrix, matrix already factorized by F07MDF	F07MGF
Inverse of real <b>symmetric</b> indefinite matrix, matrix already factorized by F07MDF	F07MJF
Estimate condition number of real <b>symmetric</b> indefinite matrix, matrix already factorized by F07PDF,...	F07PGF
Inverse of real <b>symmetric</b> indefinite matrix, matrix already factorized by F07PDF,...	F07PJF
Bunch–Kaufman factorization of real <b>symmetric</b> indefinite matrix, packed storage	F07PDF
Refined solution with error bounds of real <b>symmetric</b> indefinite system of linear equations,...	F07MHF
Solution of real <b>symmetric</b> indefinite system of linear equations,...	F07MEF
Solution of real <b>symmetric</b> indefinite system of linear equations,...	F07PEF
Refined solution with error bounds of real <b>symmetric</b> indefinite system of linear equations,...	F07PDF
Solution of real sparse <b>symmetric</b> linear system, conjugate gradient/Lanczos method,...	F11JEF
Solution of real sparse <b>symmetric</b> linear system, conjugate gradient/Lanczos method,...	F11JCF
Real sparse <b>symmetric</b> linear systems, diagnostic for F11GBF	F11GCF
Real sparse <b>symmetric</b> linear systems, pre-conditioned conjugate gradient or...	F11GBF
Real sparse <b>symmetric</b> linear systems, set-up for F11GBF	F11GAF
Apply real similarity rotation to 2 by 2 <b>symmetric</b> matrix	F06BHF
Compute eigenvalue of 2 by 2 real <b>symmetric</b> matrix	F06BPF
Matrix-vector product, real <b>symmetric</b> matrix	F06PCF
Rank-1 update, real <b>symmetric</b> matrix	F06PPF
Rank-2 update, real <b>symmetric</b> matrix	F06PRF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real <b>symmetric</b> matrix	F06RCF
...norm, largest absolute element, complex <b>symmetric</b> matrix	F06UHF
Rank- $k$ update of real <b>symmetric</b> matrix	F06YPF
Rank- $2k$ update of real <b>symmetric</b> matrix	F06YRF
Rank- $k$ update of complex <b>symmetric</b> matrix	F06ZUF
Rank- $2k$ update of complex <b>symmetric</b> matrix	F06ZWF
Bunch–Kaufman factorization of complex <b>symmetric</b> matrix	F07NRF
...matrix generated by applying SSOR to real sparse <b>symmetric</b> matrix	F11JDF
Orthogonal similarity transformation of real <b>symmetric</b> matrix as a sequence of plane rotations	F06QMF
All eigenvalues and eigenvectors of real <b>symmetric</b> matrix (Black Box)	F02FAF
Selected eigenvalues and eigenvectors of real <b>symmetric</b> matrix (Black Box)	F02FCF
Real sparse <b>symmetric</b> matrix, incomplete Cholesky factorization	F11JAF
Estimate condition number of complex <b>symmetric</b> matrix, matrix already factorized by F07NRF	F07NUF
Inverse of complex <b>symmetric</b> matrix, matrix already factorized by F07NRF	F07NWF
Estimate condition number of complex <b>symmetric</b> matrix, matrix already factorized by F07QRF,...	F07QUF
Inverse of complex <b>symmetric</b> matrix, matrix already factorized by F07QRF,...	F07QWF
Matrix-matrix product, one complex <b>symmetric</b> matrix, one complex rectangular matrix	F06ZTF
Matrix-matrix product, one real <b>symmetric</b> matrix, one real rectangular matrix	F06YCF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real <b>symmetric</b> matrix, packed storage	F06RDF
...Frobenius norm, largest absolute element, complex <b>symmetric</b> matrix, packed storage	F06UGF

Bunch–Kaufman factorization of complex	<b>symmetric</b> matrix, packed storage	F07QRF
All eigenvalues and optionally all eigenvectors of real	<b>symmetric</b> matrix, packed storage, using divide and conquer	F08GCF
Real sparse	<b>symmetric</b> matrix reorder routine	F11ZBF
Orthogonal reduction of real	<b>symmetric</b> matrix to symmetric tridiagonal form	F08FEF
Orthogonal reduction of real	<b>symmetric</b> matrix to symmetric tridiagonal form, packed storage	F08GFE
All eigenvalues and optionally all eigenvectors of real	<b>symmetric</b> matrix, using divide and conquer	F08FCF
...symmetric tridiagonal matrix, reduced from real	<b>symmetric</b> matrix using implicit $QL$ or $QR$	F08JEF
Real sparse	<b>symmetric</b> matrix vector multiply	F11XEF
Matrix-vector product, real	<b>symmetric</b> packed matrix	F06PEF
Rank-1 update, real	<b>symmetric</b> packed matrix	F06PQF
Rank-2 update, real	<b>symmetric</b> packed matrix	F06PSF
Apply real	<b>symmetric</b> plane rotation to two vectors	F06FPF
Cholesky factorization of real	<b>symmetric</b> positive-definite band matrix	F07HDF
Computes a split Cholesky factorization of real	<b>symmetric</b> positive-definite band matrix $A$	F08UUF
Determinant of real	<b>symmetric</b> positive-definite band matrix (Black Box)	F03ACF
Estimate condition number of real	<b>symmetric</b> positive-definite band matrix...	F07HGF
Refined solution with error bounds of real	<b>symmetric</b> positive-definite band system of linear equations,...	F07HHF
Solution of real	<b>symmetric</b> positive-definite band system of linear equations,...	F07HEF
Solution of real	<b>symmetric</b> positive-definite banded simultaneous linear equations...	F04ACF
Inverse of real	<b>symmetric</b> positive-definite matrix	F01ADF
$LL^T$ factorization and determinant of real	<b>symmetric</b> positive-definite matrix	F03AEF
Cholesky factorization of real	<b>symmetric</b> positive-definite matrix	F07FFD
...positive-definite tridiagonal matrix, reduced from real	<b>symmetric</b> positive-definite matrix	F08JGF
Determinant of real	<b>symmetric</b> positive-definite matrix (Black Box)	F03ABF
Estimate condition number of real	<b>symmetric</b> positive-definite matrix, matrix already factorized...	F07FGF
Inverse of real	<b>symmetric</b> positive-definite matrix, matrix already factorized...	F07JFJ
Estimate condition number of real	<b>symmetric</b> positive-definite matrix, matrix already factorized...	F07GGF
Inverse of real	<b>symmetric</b> positive-definite matrix, matrix already factorized...	F07GJF
Cholesky factorization of real	<b>symmetric</b> positive-definite matrix, packed storage	F07GDF
Inverse of real	<b>symmetric</b> positive-definite matrix using iterative refinement	F01ABF
Solution of real	<b>symmetric</b> positive-definite simultaneous linear equations,...	F04AGF
Solution of real	<b>symmetric</b> positive-definite simultaneous linear equations,...	F04ASF
Solution of real	<b>symmetric</b> positive-definite simultaneous linear equations using...	F04AFJ
Solution of real	<b>symmetric</b> positive-definite simultaneous linear equations with...	F04ABF
Refined solution with error bounds of real	<b>symmetric</b> positive-definite system of linear equations,...	F07HFF
Solution of real	<b>symmetric</b> positive-definite system of linear equations,...	F07FEF
Solution of real	<b>symmetric</b> positive-definite system of linear equations,...	F07GEF
Refined solution with error bounds of real	<b>symmetric</b> positive-definite system of linear equations,...	F07GHF
Update solution of the Yule–Walker equations for real	<b>symmetric</b> positive-definite Toeplitz matrix	F04MEF
Solution of the Yule–Walker equations for real	<b>symmetric</b> positive-definite Toeplitz matrix,...	F04FEF
Update solution of real	<b>symmetric</b> positive-definite Toeplitz system,...	F04MFF
Solution of real	<b>symmetric</b> positive-definite Toeplitz system,...	F04FFF
All eigenvalues and eigenvectors of real	<b>symmetric</b> positive-definite tridiagonal matrix, reduced...	F08JUF
All eigenvalues and eigenvectors of real	<b>symmetric</b> positive-definite tridiagonal matrix, reduced...	F08JGF
Solution of real	<b>symmetric</b> positive-definite tridiagonal simultaneous linear...	F04FAF
$LDL^T$ factorization of real	<b>symmetric</b> positive-definite variable-bandwidth matrix	F01MCF
Solution of real	<b>symmetric</b> positive-definite variable-bandwidth simultaneous linear...	F04MCF
Refined solution with error bounds of complex	<b>symmetric</b> system of linear equations, multiple right-hand sides	F07NVF
Solution of complex	<b>symmetric</b> system of linear equations, multiple right-hand sides,...	F07NSF
Solution of complex	<b>symmetric</b> system of linear equations, multiple right-hand sides,...	F07QSF
Refined solution with error bounds of complex	<b>symmetric</b> system of linear equations, multiple right-hand sides,...	F07QVF
Orthogonal reduction of real symmetric matrix to	<b>symmetric</b> tridiagonal form	F08FEF
Unitary reduction of complex Hermitian matrix to real	<b>symmetric</b> tridiagonal form	F08FSF
Orthogonal reduction of real symmetric band matrix to	<b>symmetric</b> tridiagonal form	F08HEF
Unitary reduction of complex Hermitian band matrix to real	<b>symmetric</b> tridiagonal form	F08HSF
Orthogonal reduction of real symmetric matrix to	<b>symmetric</b> tridiagonal form, packed storage	F08GEF
Unitary reduction of complex Hermitian matrix to real	<b>symmetric</b> tridiagonal form, packed storage	F08GSF
Selected eigenvalues of real	<b>symmetric</b> tridiagonal matrix by bisection	F08JFJ
Selected eigenvectors of real	<b>symmetric</b> tridiagonal matrix by inverse iteration,...	F08JXF
Selected eigenvectors of real	<b>symmetric</b> tridiagonal matrix by inverse iteration,...	F08JKF
All eigenvalues and eigenvectors of real	<b>symmetric</b> tridiagonal matrix, reduced from complex Hermitian,...	F08JSF
All eigenvalues and eigenvectors of real	<b>symmetric</b> tridiagonal matrix, reduced from real symmetric matrix,...	F08JEF
All eigenvalues of real	<b>symmetric</b> tridiagonal matrix, root-free variant of $QL$ or $QR$	F08JFF
All eigenvalues and optionally all eigenvectors of real	<b>symmetric</b> tridiagonal matrix, using divide and conquer	F08JCF
Reduction to standard form, generalized real	<b>symmetric-definite</b> banded eigenproblem	F01BVF
Reduction of real	<b>symmetric-definite</b> banded generalized eigenproblem $Ax = \lambda Bx...$	F08UEF
All eigenvalues of generalized banded real	<b>symmetric-definite</b> eigenproblem (Black Box)	F02FHF
Reduction to standard form of real	<b>symmetric-definite</b> generalized eigenproblem $Ax = \lambda Bx,...$	F08SEF
Reduction to standard form of real	<b>symmetric-definite</b> generalized eigenproblem $Ax = \lambda Bx,...$	F08TEF
All eigenvalues and eigenvectors of real	<b>symmetric-definite</b> generalized problem (Black Box)	F02FDF
Degenerate	<b>symmetrised</b> elliptic integral of 1st kind $R_C(x, y)$	S21BAF
	<b>Symmetrised</b> elliptic integral of 1st kind $R_F(x, y, z)$	S21BBF
	<b>Symmetrised</b> elliptic integral of 2nd kind $R_D(x, y, z)$	S21BCF
	<b>Symmetrised</b> elliptic integral of 3rd kind $R_J(x, y, z, r)$	S21BDF
Update solution of real symmetric positive-definite Toeplitz	<b>system</b>	F04MFF
Solution of real sparse symmetric linear	<b>system</b> , conjugate gradient/Lanczos method, Jacobi or...	F11JEF
Solution of complex sparse Hermitian linear	<b>system</b> , conjugate gradient/Lanczos method, Jacobi or...	F11JSF
Solution of real sparse symmetric linear	<b>system</b> , conjugate gradient/Lanczos method,...	F11JCF
Solution of complex sparse Hermitian linear	<b>system</b> , conjugate gradient/Lanczos method,...	F11JQF
Second-order Sturm–Liouville problem, regular	<b>system</b> , finite range, eigenvalue only	D02KAF
Second-order Sturm–Liouville problem, regular/singular	<b>system</b> , finite/infinite range, eigenvalue and eigenfunction,...	D02KEF
Second-order Sturm–Liouville problem, regular/singular	<b>system</b> , finite/infinite range, eigenvalue only,...	D02KDF
Solution of linear	<b>system</b> involving incomplete Cholesky preconditioning matrix...	F11JBF
Solution of complex linear	<b>system</b> involving incomplete Cholesky preconditioning matrix...	F11JPF
Solution of linear	<b>system</b> involving incomplete $LU$ preconditioning matrix...	F11DBF
Solution of complex linear	<b>system</b> involving incomplete $LU$ preconditioning matrix...	F11DPF
Solution of linear	<b>system</b> involving preconditioning matrix generated by applying...	F11JRF
Solution of linear	<b>system</b> involving preconditioning matrix generated by applying...	F11DRF
Solution of linear	<b>system</b> involving pre-conditioning matrix generated by applying...	F11DDF
Solution of linear	<b>system</b> involving preconditioning matrix generated by applying...	F11JDF
General	<b>system</b> of convection-diffusion PDEs with source terms in...	D03PLF
General	<b>system</b> of convection-diffusion PDEs with source terms in...	D03PSF
General	<b>system</b> of convection-diffusion PDEs with source terms in...	D03PPF
System of equations, complex triangular band matrix		F06SKF
System of equations, complex triangular matrix		F06SJF
System of equations, complex triangular packed matrix		F06SLF
System of equations, real triangular band matrix		F06PKF
System of equations, real triangular matrix		F06PJF
System of equations, real triangular packed matrix		F06PLF
Solves	<b>system</b> of equations with multiple right-hand sides,...	F06ZJF
Solves	<b>system</b> of equations with multiple right-hand sides,...	F06YJF
ODEs, boundary value problem, collocation and least-squares,	<b>system</b> of first-order linear equations	D02JBF
General	<b>system</b> of first-order PDEs, coupled DAEs, method of lines,...	D03PKF
General	<b>system</b> of first-order PDEs, coupled DAEs, method of lines,...	D03PRF
General	<b>system</b> of first-order PDEs, method of lines, Keller box...	D03PEF
Refined solution with error bounds of real	<b>system</b> of linear equations, multiple right-hand sides	F07AHF
Refined solution with error bounds of complex	<b>system</b> of linear equations, multiple right-hand sides	F07AVF
Refined solution with error bounds of real band	<b>system</b> of linear equations, multiple right-hand sides	F07BHF
Refined solution with error bounds of complex band	<b>system</b> of linear equations, multiple right-hand sides	F07BVF
...error bounds of real symmetric positive-definite	<b>system</b> of linear equations, multiple right-hand sides	F07FHF
...bounds of complex Hermitian positive-definite	<b>system</b> of linear equations, multiple right-hand sides	F07FVF
...bounds of real symmetric positive-definite band	<b>system</b> of linear equations, multiple right-hand sides	F07HHF
...bounds of complex Hermitian positive-definite band	<b>system</b> of linear equations, multiple right-hand sides	F07HVF

Refined solution with error bounds of real symmetric indefinite <b>system</b> of linear equations, multiple right-hand sides	F07MHF
Refined solution with error bounds of complex Hermitian indefinite <b>system</b> of linear equations, multiple right-hand sides	F07MVF
Refined solution with error bounds of complex symmetric <b>system</b> of linear equations, multiple right-hand sides	F07NVF
Solution of real triangular <b>system</b> of linear equations, multiple right-hand sides	F07THF
Error bounds for solution of real triangular <b>system</b> of linear equations, multiple right-hand sides	F07THF
Solution of complex triangular <b>system</b> of linear equations, multiple right-hand sides	F07TSF
Error bounds for solution of complex triangular <b>system</b> of linear equations, multiple right-hand sides	F07TVF
Solution of real band triangular <b>system</b> of linear equations, multiple right-hand sides	F07VEF
Error bounds for solution of real band triangular <b>system</b> of linear equations, multiple right-hand sides	F07VHF
Solution of complex band triangular <b>system</b> of linear equations, multiple right-hand sides	F07VSF
Error bounds for solution of complex band triangular <b>system</b> of linear equations, multiple right-hand sides	F07VVF
Solution of real <b>system</b> of linear equations, multiple right-hand sides,...	F07AEF
Solution of complex <b>system</b> of linear equations, multiple right-hand sides,...	F07ASF
Solution of real band <b>system</b> of linear equations, multiple right-hand sides,...	F07BEF
Solution of complex band <b>system</b> of linear equations, multiple right-hand sides,...	F07BSF
Solution of real symmetric positive-definite <b>system</b> of linear equations, multiple right-hand sides,...	F07FEF
Solution of complex Hermitian positive-definite <b>system</b> of linear equations, multiple right-hand sides,...	F07FSF
Solution of real symmetric positive-definite <b>system</b> of linear equations, multiple right-hand sides,...	F07GEF
Solution of complex Hermitian positive-definite <b>system</b> of linear equations, multiple right-hand sides,...	F07GSF
Solution of real symmetric positive-definite band <b>system</b> of linear equations, multiple right-hand sides,...	F07HEF
Solution of complex Hermitian positive-definite band <b>system</b> of linear equations, multiple right-hand sides,...	F07HSF
Solution of real symmetric indefinite <b>system</b> of linear equations, multiple right-hand sides,...	F07MEF
Solution of complex Hermitian indefinite <b>system</b> of linear equations, multiple right-hand sides,...	F07MSF
Solution of real symmetric indefinite <b>system</b> of linear equations, multiple right-hand sides,...	F07NSF
Solution of complex Hermitian indefinite <b>system</b> of linear equations, multiple right-hand sides,...	F07PEF
Solution of real symmetric indefinite <b>system</b> of linear equations, multiple right-hand sides,...	F07PSF
Solution of complex symmetric <b>system</b> of linear equations, multiple right-hand sides,...	F07QSF
...error bounds of real symmetric positive-definite <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07GHF
...bounds of complex Hermitian positive-definite <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07GVF
Refined solution with error bounds of real symmetric indefinite <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07PHF
Refined solution with error bounds of complex Hermitian indefinite <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07PVF
Refined solution with error bounds of complex symmetric <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07QVF
Solution of real triangular <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07UEF
Error bounds for solution of real triangular <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07UHF
Solution of complex triangular <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07USF
Error bounds for solution of complex triangular <b>system</b> of linear equations, multiple right-hand sides, packed storage	F07UVF
Solution of <b>system</b> of nonlinear equations using first derivatives (comprehensive)	C05PCF
Solution of <b>system</b> of nonlinear equations using first derivatives (easy-to-use)	C05PBF
Solution of <b>system</b> of nonlinear equations using first derivatives...	C05PDF
Solution of <b>system</b> of nonlinear equations using function values only...	C05NCF
Solution of <b>system</b> of nonlinear equations using function values only...	C05NBF
Solution of <b>system</b> of nonlinear equations using function values only...	C05NDF
General <b>system</b> of parabolic PDEs, coupled DAEs, method of lines,...	D03PJF
General <b>system</b> of parabolic PDEs, coupled DAEs, method of lines,...	D03PHF
General <b>system</b> of parabolic PDEs, coupled DAEs, method of lines,...	D03PPF
General <b>system</b> of parabolic PDEs, method of lines, Chebyshev $C^0$ ...	D03PDF
General <b>system</b> of parabolic PDEs, method of lines, finite differences,...	D03PCF
General <b>system</b> of second-order PDEs, method of lines, finite differences,...	D03RAF
General <b>system</b> of second-order PDEs, method of lines, finite differences,...	D03RBF
Solution of real symmetric positive-definite Toeplitz <b>system</b> , one right-hand side	F04FFF
Solution of complex sparse non-Hermitian linear <b>system</b> , RGMRES, CGS, Bi-CGSTAB or TFQMR method,...	F11DSF
Solution of complex sparse non-Hermitian linear <b>system</b> , RGMRES, CGS, Bi-CGSTAB or TFQMR method,...	F11DQF
Solution of real sparse nonsymmetric linear <b>system</b> , RGMRES, CGS or Bi-CGSTAB method, Jacobi or SSOR,...	F11DEF
Solution of real sparse nonsymmetric linear <b>system</b> , RGMRES, CGS or Bi-CGSTAB method,...	F11DCF
Real sparse nonsymmetric linear <b>systems</b> , diagnostic for F11BBF	F11BCF
Real sparse nonsymmetric linear <b>systems</b> , diagnostic for F11BEF	F11BBF
Complex sparse non-Hermitian linear <b>systems</b> , diagnostic for F11BSF	F11BTF
Real sparse symmetric linear <b>systems</b> , diagnostic for F11GBF	F11GCF
Real sparse nonsymmetric linear <b>systems</b> , incomplete LU factorization	F11DAF
Complex sparse non-Hermitian linear <b>systems</b> , incomplete LU factorization	F11DNF
Real sparse symmetric linear <b>systems</b> , pre-conditioned conjugate gradient or Lanczos	F11GBF
Real sparse nonsymmetric linear <b>systems</b> , preconditioned RGMRES, CGS, Bi-CGSTAB,...	F11BEF
Complex sparse non-Hermitian linear <b>systems</b> , preconditioned RGMRES, CGS, Bi-CGSTAB,...	F11BSF
Real sparse nonsymmetric linear <b>systems</b> , preconditioned RGMRES, CGS or Bi-CGSTAB	F11BBF
Real sparse nonsymmetric linear <b>systems</b> , set-up for F11BBF	F11BAF
Real sparse nonsymmetric linear <b>systems</b> , set-up for F11BEF	F11BDF
Complex sparse non-Hermitian linear <b>systems</b> , set-up for F11BSF	F11BRF
Real sparse symmetric linear <b>systems</b> , set-up for F11GBF	F11GAF
Multi-dimensional quadrature, Sag-Szekeres method, general product region or $n$ -sphere	D01PDF
Computes probabilities for Student's $t$ -distribution	G01EBF
Computes deviates for Student's $t$ -distribution	G01FBF
Computes probabilities for the non-central Student's $t$ -distribution	G01GBF
Pseudo-random real numbers, Student's $t$ -distribution	G05DJF
Computes $t$ -test statistic for a difference in means between two Normal...	G07CAF
...skewness, kurtosis, etc, one variable, from frequency <b>table</b>	G01ADF
$\chi^2$ statistics for two-way contingency <b>table</b>	G11AAF
Two-way contingency <b>table</b> analysis, with $\chi^2$ /Fisher's exact test	G01AFF
Computes marginal tables for multiway <b>table</b> computed by G11BAF or G11BBF	G11BCF
Frequency <b>table</b> from raw data	G01AEF
Computes multiway <b>table</b> from set of classification factors using given percentile/quantile	G11BBF
Computes multiway <b>table</b> from set of classification factors using selected statistic	G11BAF
Contingency <b>table</b> , latent variable model for binary data	G11SAF
Computes marginal <b>tables</b> for multiway table computed by G11BAF or G11BBF	G11BCF
Computes upper and lower <b>tail</b> probabilities and probability density function for...	G01EEF
Computes lower <b>tail</b> probability for a linear combination of (central) $\chi^2$ variables	G01JDF
tan $x$	S07AAF
Generate real plane rotation, storing <b>tangent</b>	F06BAF
Recover cosine and sine from given real <b>tangent</b>	F06BCF
Generate complex plane rotation, storing <b>tangent</b> , real cosine	F06CAF
Recover cosine and sine from given complex <b>tangent</b> , real cosine	F06CCF
Generate complex plane rotation, storing <b>tangent</b> , real sine	F06CBF
Recover cosine and sine from given complex <b>tangent</b> , real sine	F06CDF
tanh $x$	S10AAF
Two-way contingency table analysis, with $\chi^2$ /Fisher's exact <b>test</b>	G01AFF
Performs the Wilcoxon one-sample (matched pairs) signed rank <b>test</b>	G08AGF
Performs the two-sample Kolmogorov-Smirnov <b>test</b>	G08CDF
Performs the one-sample Kolmogorov-Smirnov <b>test</b> for a user-supplied distribution	G08CCF
Shapiro and Wilk's $W$ <b>test</b> for Normality	G01DDF
Performs the runs up or runs down <b>test</b> for randomness	G08EAF
Performs the pairs (serial) <b>test</b> for randomness	G08EBF
Performs the triplets <b>test</b> for randomness	G08ECF
Performs the gaps <b>test</b> for randomness	G08EDF
Performs the $\chi^2$ goodness of fit <b>test</b> , for standard continuous distributions	G08CGF
Performs the one-sample Kolmogorov-Smirnov <b>test</b> for standard distributions	G08CBF

Performs the Cochran <i>Q</i> test on cross-classified binary data	G08ALF
Performs the Mann–Whitney <i>U</i> test on two independent samples	G08AHF
Sign test on two paired samples	G08AAF
Median test on two samples of unequal size	G08ACF
Computes Durbin–Watson test statistic	G02FCF
Computes <i>t</i> -test statistic for a difference in means between two Normal...	G07CAF
Computes test statistic for equality of within-group covariance matrices...	G03DAF
Dispersion tests	G08
Goodness of fit tests	G08
Location tests	G08
Non-parametric tests	G08
Mood's and David's tests on two samples of unequal size	G08BAF
...systems, preconditioned RGMRES, CGS, Bi-CGSTAB or TFQMR method	F11BEF
...systems, preconditioned RGMRES, CGS, Bi-CGSTAB or TFQMR method	F11BSF
...non-Hermitian linear system, RGMRES, CGS, Bi-CGSTAB or TFQMR method, Jacobi or SSOR preconditioner (Black Box)	F11DSF
...non-Hermitian linear system, RGMRES, CGS, Bi-CGSTAB or TFQMR method, preconditioner computed by F11DNF (Black Box)	F11DQF
Elliptic PDE, Helmholtz equation, three-dimensional Cartesian co-ordinates	D03FAF
Three-dimensional complex discrete Fourier transform	C06FXF
Three-dimensional complex discrete Fourier transform, complex...	C06PXF
...finite difference equations by SIP for seven-point three-dimensional molecule, iterate to convergence	D03ECF
...finite difference equations by SIP, seven-point three-dimensional molecule, one iteration	D03UBF
...probabilities for the Mann–Whitney <i>U</i> statistic, no ties in pooled sample	G08AJF
...probabilities for the Mann–Whitney <i>U</i> statistic, ties in pooled sample	G08AKF
Compare two character strings representing date and time	X05ACF
Return the CPU time	X05BAF
Return date and time as an array of integers	X05AAF
Multivariate time series, cross amplitude spectrum, squared coherency,...	G13BCF
Multivariate time series, cross-correlations	G13ASF
Univariate time series, diagnostic checking of residuals,...	G13DSF
Multivariate time series, diagnostic checking of residuals,...	G13DLF
Multivariate time series, differences and/or transforms...	G13BEF
Multivariate time series, estimation of multi-input model	G13DCF
Multivariate time series, estimation of VARMA model	G13AEF
Univariate time series, estimation, seasonal ARIMA model (comprehensive)	G13AFF
Univariate time series, estimation, seasonal ARIMA model (easy-to-use)	G13BBF
Multivariate time series, filtering by a transfer function model	G13BAF
Multivariate time series, filtering (pre-whitening) by an ARIMA model	G13AHF
Univariate time series, forecasting from state set	G13BHF
Multivariate time series, forecasting from state set of multi-input model	G13DJF
Multivariate time series, forecasts and their standard errors	G05HDF
Generates a realisation of a multivariate time series from a VARMA model	G13CFE
Multivariate time series, gain, phase, bounds, univariate and bivariate...	G05EGF
Set up reference vector for univariate ARMA time series model	G05EWF
Generate next term from reference vector for ARMA time series model	G13DBF
Multivariate time series, multiple squared partial autocorrelations	G13CGF
Multivariate time series, noise spectrum, bounds, impulse response function...	G13ACF
Univariate time series, partial autocorrelations from autocorrelations	G13DPF
Multivariate time series, partial autoregression matrices	G13BDF
Multivariate time series, preliminary estimation of transfer function model	G13ADF
Univariate time series, preliminary estimation, seasonal ARIMA model	G13ABF
Univariate time series, sample autocorrelation function	G13DMF
Multivariate time series, sample cross-correlation or cross-covariance matrices	G13DNF
Multivariate time series, sample partial lag correlation matrices, $\chi^2$ statistics...	G13AAF
Univariate time series, seasonal and non-seasonal differencing	G13CCF
Multivariate time series, smoothed sample cross spectrum using rectangular,...	G13CDF
Multivariate time series, smoothed sample cross spectrum using...	G13CAF
Univariate time series, smoothed sample spectrum using...	G13CBF
Univariate time series, smoothed sample spectrum using...	G13BJF
Multivariate time series, state set and forecasts from...	G13AJF
Univariate time series, state set and forecasts, from...	G13AGF
Univariate time series, update state set for forecasting	G13BGF
Multivariate time series, update state set for forecasting from...	G13DKF
Multivariate time series, updates forecasts and their standard errors	X05ABF
Convert array of integers representing date and time to character string	G13EBF
Combined measurement and time update, one iteration of Kalman filter, time-invariant,...	G13EAF
Combined measurement and time update, one iteration of Kalman filter, time-varying,...	
...time update, one iteration of Kalman filter, time-invariant, square root covariance filter	G13EBF
...time update, one iteration of Kalman filter, time-varying, square root covariance filter	G13EAF
...equations for real symmetric positive-definite Toeplitz matrix	F04MEF
...equations for real symmetric positive-definite Toeplitz matrix, one right-hand side	F04FEF
Update solution of real symmetric positive-definite Toeplitz system	F04MFF
Solution of real symmetric positive-definite Toeplitz system, one right-hand side	F04FFF
Multivariate time series, filtering by a transfer function model	G13BBF
Multivariate time series, preliminary estimation of transfer function model	G13BDF
Two-dimensional complex discrete Fourier transform	C06FUF
Three-dimensional complex discrete Fourier transform	C06FXF
Discrete sine transform	C06HAF
Discrete cosine transform	C06HBF
Discrete quarter-wave sine transform	C06HCF
Discrete quarter-wave cosine transform	C06HDF
...function $1/(x - c)$ , Cauchy principal value (Hilbert transform)	D01AQF
Evaluate inverse Laplace transform as computed by C06LBF	C06LCF
Single one-dimensional complex discrete Fourier transform, complex data format	C06PCF
Two-dimensional complex discrete Fourier transform, complex data format	C06PUF
Three-dimensional complex discrete Fourier transform, complex data format	C06PXF
Inverse Laplace transform, Crump's method	C06LAF
Discrete sine transform (easy-to-use)	C06RAF
Discrete cosine transform (easy-to-use)	C06RBF
Discrete quarter-wave sine transform (easy-to-use)	C06RCF
Discrete quarter-wave cosine transform (easy-to-use)	C06RDF
Transform eigenvectors of complex balanced matrix to...	F08NWF
Transform eigenvectors of real balanced matrix to...	F08NHF
Single one-dimensional real discrete Fourier transform, extra workspace for greater speed	C06FAF
Single one-dimensional Hermitian discrete Fourier transform, extra workspace for greater speed	C06FBF
Single one-dimensional complex discrete Fourier transform, extra workspace for greater speed	C06FCF
Inverse Laplace transform, modified Weeks' method	C06LBF
Single one-dimensional real discrete Fourier transform, no extra workspace	C06EAF
Single one-dimensional Hermitian discrete Fourier transform, no extra workspace	C06EBF
Single one-dimensional complex discrete Fourier transform, no extra workspace	C06ECF
One-dimensional complex discrete Fourier transform of multi-dimensional data	C06FFF
Multi-dimensional complex discrete Fourier transform of multi-dimensional data	C06JFJ
One-dimensional complex discrete Fourier transform of multi-dimensional data (using complex data type)	C06PFF
Multi-dimensional complex discrete Fourier transform of multi-dimensional data (using complex data type)	C06PJF
Single one-dimensional real and Hermitian complex discrete Fourier transform, using complex data format for Hermitian sequences	C06PAF
...factorization of real matrix using orthogonal similarity transformation	F08QFF

...factorization of complex matrix using unitary similarity	<b>transformation</b>	F08QTF
Acceleration of convergence of sequence, Shanks'	<b>transformation</b> and epsilon algorithm	C06BAF
Apply orthogonal	<b>transformation</b> determined by F08AEF or F08BEF	F08AGF
Apply orthogonal	<b>transformation</b> determined by F08AHF	F08AKF
Apply unitary	<b>transformation</b> determined by F08ASF or F08BSF	F08AUF
Apply unitary	<b>transformation</b> determined by F08AVF	F08AXF
Apply orthogonal	<b>transformation</b> determined by F08FEF	F08FGF
Apply orthogonal	<b>transformation</b> determined by F08GEF	F08GGF
Generate orthogonal	<b>transformation</b> matrices from reduction to bidiagonal form...	F08KFF
Generate unitary	<b>transformation</b> matrices from reduction to bidiagonal form...	F08KTF
Apply unitary	<b>transformation</b> matrix determined by F08FSF	F08FUF
Apply unitary	<b>transformation</b> matrix determined by F08GSF	F08GUF
Generate orthogonal	<b>transformation</b> matrix from reduction to Hessenberg form...	F08NFF
Apply orthogonal	<b>transformation</b> matrix from reduction to Hessenberg form...	F08NGF
Generate unitary	<b>transformation</b> matrix from reduction to Hessenberg form...	F08NTF
Apply unitary	<b>transformation</b> matrix from reduction to Hessenberg form...	F08NUF
Generate orthogonal	<b>transformation</b> matrix from reduction to tridiagonal form...	F08FTF
Generate unitary	<b>transformation</b> matrix from reduction to tridiagonal form...	F08FTF
Generate orthogonal	<b>transformation</b> matrix from reduction to tridiagonal form...	F08GFF
Generate unitary	<b>transformation</b> matrix from reduction to tridiagonal form...	F08GTF
Unitary similarity	<b>transformation</b> of Hermitian matrix as a sequence of plane...	F06TMF
Orthogonal similarity	<b>transformation</b> of real symmetric matrix as a sequence of plane...	F06QMF
Apply orthogonal	<b>transformations</b> from reduction to bidiagonal form determined...	F08KGF
Apply unitary	<b>transformations</b> from reduction to bidiagonal form determined...	F08KUF
Multiple one-dimensional real discrete Fourier	<b>transforms</b>	C06PPF
Multiple one-dimensional Hermitian discrete Fourier	<b>transforms</b>	C06PQF
Multiple one-dimensional complex discrete Fourier	<b>transforms</b>	C06FRF
Multivariate time series, differences and/or	<b>transforms</b> (for use before G13DCF)	G13DLF
Multiple one-dimensional complex discrete Fourier	<b>transforms</b> using complex data format	C06PRF
Multiple one-dimensional complex discrete Fourier	<b>transforms</b> using complex data format and sequences stored...	C06PSF
...one-dimensional real and Hermitian complex discrete Fourier	<b>transforms</b> , using complex data format for Hermitian sequences	C06PPF
...one-dimensional real and Hermitian complex discrete Fourier	<b>transforms</b> , using complex data format for Hermitian sequences...	C06PQF
	<b>Transportation</b> problem, modified 'stepping stone' method	H03ABF
	Matrix <b>transposition</b>	F01CRF
Sum or difference of two real matrices, optional scaling and	<b>transposition</b>	F01CTF
Sum or difference of two complex matrices, optional scaling and	<b>transposition</b>	F01CWF
...sample spectrum using spectral smoothing by the	<b>trapezium</b> frequency (Daniell) window	G13CBF
...cross spectrum using spectral smoothing by the	<b>trapezium</b> frequency (Daniell) window	G13CDF
Matrix copy, real rectangular or	<b>trapezoidal</b> matrix	F06QFF
Matrix copy, complex rectangular or	<b>trapezoidal</b> matrix	F06TFF
RQ factorization of complex $m$ by $n$ upper	<b>trapezoidal</b> matrix ( $m \leq n$ )	F01RGF
RQ factorization of real $m$ by $n$ upper	<b>trapezoidal</b> matrix ( $m \leq n$ )	F01QGF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real	<b>trapezoidal/triangular</b> matrix	F06RJF
...Frobenius norm, largest absolute element, complex	<b>trapezoidal/triangular</b> matrix	F06UJF
Convert real matrix between packed	<b>triangular</b> and square storage schemes	F01ZAF
Convert complex matrix between packed	<b>triangular</b> and square storage schemes	F01ZBF
Matrix-vector product, real	<b>triangular</b> band matrix	F06PGF
System of equations, real	<b>triangular</b> band matrix	F06PKF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real	<b>triangular</b> band matrix	F06RLF
Matrix-vector product, complex	<b>triangular</b> band matrix	F06SCF
System of equations, complex	<b>triangular</b> band matrix	F06SKF
...Frobenius norm, largest absolute element, complex	<b>triangular</b> band matrix	F06ULF
Solves system of equations with multiple right-hand sides, real	<b>triangular</b> coefficient matrix	F06YJF
Solves system of equations with multiple right-hand sides, complex	<b>triangular</b> coefficient matrix	F06ZJF
Matrix-vector product, real	<b>triangular</b> matrix	F06PFF
System of equations, real	<b>triangular</b> matrix	F06PJF
...plane rotations, rank-1 update of real upper	<b>triangular</b> matrix	F06QPF
...matrix by sequence of plane rotations, real upper	<b>triangular</b> matrix	F06QVF
...matrix by sequence of plane rotations, real upper	<b>triangular</b> matrix	F06QWF
...norm, largest absolute element, real trapezoidal/triangular matrix	<b>triangular</b> matrix	F06RJF
Matrix-vector product, complex	<b>triangular</b> matrix	F06SFF
System of equations, complex	<b>triangular</b> matrix	F06SJF
...plane rotations, rank-1 update of complex upper	<b>triangular</b> matrix	F06TPF
...by sequence of plane rotations, complex upper	<b>triangular</b> matrix	F06TVF
...by sequence of plane rotations, complex upper	<b>triangular</b> matrix	F06TWF
...largest absolute element, complex trapezoidal/triangular matrix	<b>triangular</b> matrix	F06UJF
Estimate condition number of real	<b>triangular</b> matrix	F07TGF
Inverse of real	<b>triangular</b> matrix	F07TJF
Estimate condition number of complex	<b>triangular</b> matrix	F07TUF
Inverse of complex	<b>triangular</b> matrix	F07TWf
Estimate condition number of real band	<b>triangular</b> matrix	F07VGF
Estimate condition number of complex band	<b>triangular</b> matrix	F07VUF
Left and right eigenvectors of real upper quasi-	<b>triangular</b> matrix	F08QKF
...eigenvalues and eigenvectors of real upper quasi-	<b>triangular</b> matrix	F08QLF
Left and right eigenvectors of complex upper	<b>triangular</b> matrix	F08QXF
...eigenvalues and eigenvectors of complex upper	<b>triangular</b> matrix	F08QYF
QR factorization by sequence of plane rotations, real upper	<b>triangular</b> matrix augmented by a full row	F06QQF
QR factorization by sequence of plane rotations, complex upper	<b>triangular</b> matrix augmented by a full row	F06TQF
SVD of real upper	<b>triangular</b> matrix (Black Box)	F02WUF
SVD of complex upper	<b>triangular</b> matrix (Black Box)	F02XUF
Print real packed	<b>triangular</b> matrix (comprehensive)	X04CDF
Print complex packed	<b>triangular</b> matrix (comprehensive)	X04DDF
Print real packed	<b>triangular</b> matrix (easy-to-use)	X04CCF
Print complex packed	<b>triangular</b> matrix (easy-to-use)	X04DCF
Matrix-matrix product, one complex	<b>triangular</b> matrix, one complex rectangular matrix	F06ZFF
Matrix-matrix product, one real	<b>triangular</b> matrix, one real rectangular matrix	F06YFF
1-norm, $\infty$ -norm, Frobenius norm, largest absolute element, real	<b>triangular</b> matrix, packed storage	F06RKF
...Frobenius norm, largest absolute element, complex	<b>triangular</b> matrix, packed storage	F06UKF
Estimate condition number of real	<b>triangular</b> matrix, packed storage	F07UGF
Inverse of real	<b>triangular</b> matrix, packed storage	F07UJF
Estimate condition number of complex	<b>triangular</b> matrix, packed storage	F07UUF
Inverse of complex	<b>triangular</b> matrix, packed storage	F07UWF
...equation $AX + XB = C$ , $A$ and $B$ are upper	<b>triangular</b> or conjugate-transposes	F08QVF
...equation $AX + XB = C$ , $A$ and $B$ are upper quasi-	<b>triangular</b> or transposes	F08QVF
Matrix-vector product, real	<b>triangular</b> packed matrix	F06PHF
System of equations, real	<b>triangular</b> packed matrix	F06PLF
Matrix-vector product, complex	<b>triangular</b> packed matrix	F06SHF
System of equations, complex	<b>triangular</b> packed matrix	F06SLF
Solution of real	<b>triangular</b> system of linear equations, multiple right-hand sides	F07TEF
Error bounds for solution of real	<b>triangular</b> system of linear equations, multiple right-hand sides	F07THF
Solution of complex	<b>triangular</b> system of linear equations, multiple right-hand sides	F07TSF
Error bounds for solution of complex	<b>triangular</b> system of linear equations, multiple right-hand sides	F07TVF
Solution of real band	<b>triangular</b> system of linear equations, multiple right-hand sides	F07VEF
Error bounds for solution of real band	<b>triangular</b> system of linear equations, multiple right-hand sides	F07VHF
Solution of complex band	<b>triangular</b> system of linear equations, multiple right-hand sides	F07VSF
Error bounds for solution of complex band	<b>triangular</b> system of linear equations, multiple right-hand sides	F07VVF
Solution of real	<b>triangular</b> system of linear equations, multiple right-hand sides,...	F07UEF
Error bounds for solution of real	<b>triangular</b> system of linear equations, multiple right-hand sides,...	F07UHF
Solution of complex	<b>triangular</b> system of linear equations, multiple right-hand sides,...	F07USF

<p>Error bounds for solution of complex <math>QR</math> factorization of <math>UZ</math> or <math>RQ</math> factorization of <math>ZU</math>, <math>U</math> real upper  ...<math>RQ</math> factorization of <math>ZU</math>, <math>U</math> complex upper</p>	<p><b>triangular</b> system of linear equations, multiple right-hand sides,...  <b>triangular</b>, <math>Z</math> a sequence of plane rotations  <b>triangular</b>, <math>Z</math> a sequence of plane rotations</p>	<p>F07UVF  F06QTF  F06TTF</p>	
	<p><b>Triangulation</b> of plane region</p>	<p>D03MAF</p>	
<p>Orthogonal reduction of real symmetric matrix to symmetric  Unitary reduction of complex Hermitian matrix to real symmetric  Orthogonal reduction of real symmetric band matrix to symmetric  ...complex Hermitian band matrix to real symmetric  Generate orthogonal transformation matrix from reduction to  Generate unitary transformation matrix from reduction to  Generate orthogonal transformation matrix from reduction to  Generate unitary transformation matrix from reduction to  Orthogonal reduction of real symmetric matrix to symmetric  Unitary reduction of complex Hermitian matrix to real symmetric</p>	<p><b>tridiagonal</b> form  <b>tridiagonal</b> form  <b>tridiagonal</b> form  <b>tridiagonal</b> form  <b>tridiagonal</b> form determined by F08FEF  <b>tridiagonal</b> form determined by F08FSF  <b>tridiagonal</b> form determined by F08GEF  <b>tridiagonal</b> form determined by F08GSF  <b>tridiagonal</b> form, packed storage  <b>tridiagonal</b> form, packed storage  <b>tridiagonal</b> matrix  <b>tridiagonal</b> matrix by bisection  <b>tridiagonal</b> matrix by inverse iteration, storing eigenvectors...  <b>tridiagonal</b> matrix by inverse iteration, storing eigenvectors...  <b>tridiagonal</b> matrix, reduced from complex Hermitian matrix,...  <b>tridiagonal</b> matrix, reduced from complex Hermitian...  <b>tridiagonal</b> matrix, reduced from real symmetric matrix using...  <b>tridiagonal</b> matrix, reduced from real symmetric...  <b>tridiagonal</b> matrix, root-free variant of <math>QL</math> or <math>QR</math>  <b>tridiagonal</b> matrix, using divide and conquer  <b>tridiagonal</b> simultaneous linear equations...  <b>tridiagonal</b> simultaneous linear equations, one right-hand side...  <b>tridiagonal</b> simultaneous linear equations, one right-hand side...</p>	<p>F08FEF  F08FSF  F08HEF  F08HSF  F08FFF  F08FTF determined by F08FSF  F08GTF determined by F08GEF  F08GSF determined by F08GSF  F08GEF  F08GSF  F01LEF  F08JFF  F08JXF  F08JKF  F08JSF  F08JUF  F08JEF  F08JGF  F08JFF  F08JCF  F04LEF  F04EAF  F04FAF</p>	
	<p>Computes a <b>trimmed</b> and winsorized mean of a single sample with estimates...</p>	<p>G07DDF</p>	
	<p>Performs the <b>triplets</b> test for randomness</p>	<p>G08ECF</p>	
<p>...sample spectrum using rectangular, Bartlett,  ...sample cross spectrum using rectangular, Bartlett,</p>	<p><b>Tukey</b> or Parzen lag window  <b>Tukey</b> or Parzen lag window</p>	<p>G13CAF  G13CCF</p>	
<p>Elliptic PDE, Laplace's equation,  Sort  ...finite difference equations by SIP, five-point  ...finite difference equations by SIP, five-point</p>	<p><b>two-dimensional</b> arbitrary domain  <b>Two-dimensional</b> complex discrete Fourier transform  <b>Two-dimensional</b> complex discrete Fourier transform,...  <b>two-dimensional</b> data into panels for fitting bicubic splines  <b>two-dimensional</b> molecule, iterate to convergence  <b>two-dimensional</b> molecule, one iteration</p>	<p>D03EAF  C06FUF  C06PUF  E02ZAF  D03EBF  D03UAF</p>	
	<p>Computes probabilities for the  Performs the</p>	<p><b>two-sample</b> Kolmogorov-Smirnov distribution  <b>two-sample</b> Kolmogorov-Smirnov test</p>	<p>G01EZF  G08CDF</p>
	<p>Friedman  <math>\chi^2</math> statistics for</p>	<p><b>Two-way</b> analysis of variance, hierarchical classification,...  <b>two-way</b> analysis of variance on <math>k</math> matched samples  <b>two-way</b> contingency table  <b>Two-way</b> contingency table analysis, with <math>\chi^2</math>/Fisher's exact test</p>	<p>G04AGF  G08AEF  G11AAF  G01AFF</p>
	<p>Regression using ranks,</p>	<p><b>uncensored</b> data</p>	<p>G08RAF</p>
<p>Dot product of two complex vectors,  Dot product of two complex sparse vector,  Rank-1 update, complex rectangular matrix,</p>	<p><b>unconjugated</b>  <b>unconjugated</b>  <b>unconjugated</b> vector</p>	<p>F06GAF  F06GRF  F06SMF</p>	
	<p><b>Unconstrained</b> minimum of a sum of squares, combined...  <b>Unconstrained</b> minimum, pre-conditioned conjugate gradient...  <b>Unconstrained</b> minimum, simplex algorithm, function of...</p>	<p>E04GDF  E04GZF  E04FCF  E04FYF  E04HEF  E04HYF  E04GBF  E04GYF  E04DGF  E04CCF</p>	
	<p>Switch for taking precautions to avoid</p>	<p><b>underflow</b></p>	<p>X02DAF</p>
	<p>Interpolated values, Aitken's technique,</p>	<p><b>unequally</b> spaced data, one variable</p>	<p>E01AAF</p>
<p>Pseudo-random integer from  Set up reference vector for generating pseudo-random integers,  Generates a vector of random numbers from a  Pseudo-random real numbers,  Pseudo-random real numbers,</p>	<p><b>uniform</b> distribution  <b>uniform</b> distribution  <b>uniform</b> distribution  <b>uniform</b> distribution over (0,1)  <b>uniform</b> distribution over (a, b)</p>	<p>G05DYF  G05EBF  G05FAF  G05CAF  G05DAF</p>	
<p>Operations with  Form all or part of  Form all or part of</p>	<p><b>unitary</b> matrices, form rows of <math>Q</math>, after <math>RQ</math> factorization by F01RJF  <b>unitary</b> <math>Q</math> from <math>LQ</math> factorization determined by F08AVF  <b>unitary</b> <math>Q</math> from <math>QR</math> factorization determined by F08ASF or F08BSF  <b>Unitary</b> reduction of complex general matrix to upper Hessenberg...  <b>Unitary</b> reduction of complex general rectangular matrix to...  <b>Unitary</b> reduction of complex Hermitian band matrix to...  <b>Unitary</b> reduction of complex Hermitian matrix to...  <b>Unitary</b> reduction of complex Hermitian matrix to...</p>	<p>F01RKF  F08AWF  F08ATF  F08NSF  F08KSF  F08HSF  F08FSF  F08GSF  F08QTF  F06TMF  F08AUF  F08AXF  F08KTF  F08FUF  F08GUF  F08NTF  F08NUF  F08FTF  F08GTF  F08KUF</p>	
<p>Reorder Schur factorization of complex matrix using</p>	<p><b>unitary</b> similarity transformation  <b>Unitary</b> similarity transformation of Hermitian matrix as...  Apply <b>unitary</b> transformation determined by F08ASF or F08BSF  Apply <b>unitary</b> transformation determined by F08AVF  Generate <b>unitary</b> transformation matrices from reduction to...  Apply <b>unitary</b> transformation matrix determined by F08FSF  Apply <b>unitary</b> transformation matrix determined by F08GSF  Generate <b>unitary</b> transformation matrix from reduction to...  Apply <b>unitary</b> transformation matrix from reduction to...  Generate <b>unitary</b> transformation matrix from reduction to...  Generate <b>unitary</b> transformation matrix from reduction to...  Apply <b>unitary</b> transformations from reduction to...</p>	<p>F08QTF  F06TMF  F08AUF  F08AXF  F08KTF  F08FUF  F08GUF  F08NTF  F08NUF  F08FTF  F08GTF  F08KUF</p>	
<p>...amplitude spectrum, squared coherency, bounds,  Multivariate time series, gain, phase, bounds,  Set up reference vector for</p>	<p><b>univariate</b> and bivariate (cross) spectra  <b>univariate</b> and bivariate (cross) spectra  <b>univariate</b> ARMA time series model  <b>Univariate</b> time series, diagnostic checking of residuals,...  <b>Univariate</b> time series, estimation, seasonal ARIMA model...  <b>Univariate</b> time series, estimation, seasonal ARIMA model...  <b>Univariate</b> time series, forecasting from state set  <b>Univariate</b> time series, partial autocorrelations from autocorrelations  <b>Univariate</b> time series, preliminary estimation, seasonal ARIMA...  <b>Univariate</b> time series, sample autocorrelation function  <b>Univariate</b> time series, seasonal and non-seasonal differencing  <b>Univariate</b> time series, smoothed sample spectrum using...  <b>Univariate</b> time series, smoothed sample spectrum using...  <b>Univariate</b> time series, state set and forecasts, from fully specified...  <b>Univariate</b> time series, update state set for forecasting</p>	<p>G13CEF  G13CCF  G05EGF  G13ASF  G13AEF  G13AFF  G13AHF  G13ACF  G13ADF  G13ABF  G13AAF  G13CAF  G13CBF  G13AJF  G13AGF</p>	

	Update a weighted sum of squares matrix with a new observation	G02BTF
	Rank-1 update, complex Hermitian matrix	F06SPF
	Rank-2 update, complex Hermitian matrix	F06SRF
	Rank-1 update, complex Hermitian packed matrix	F06SQF
	Rank-2 update, complex Hermitian packed matrix	F06SSF
	Rank-1 update, complex rectangular matrix, conjugated vector	F06SNF
	Rank-1 update, complex rectangular matrix, unconjugated vector	F06SMF
	Update Euclidean norm of complex vector in scaled form	F06KJF
	Update Euclidean norm of real vector in scaled form	F06JFJ
	Rank- $k$ update of complex Hermitian matrix	F06ZPF
	Rank- $2k$ update of complex Hermitian matrix	F06ZRF
	Rank- $k$ update of complex symmetric matrix	F06ZUF
	Rank- $2k$ update of complex symmetric matrix	F06ZWF
QR factorization by sequence of plane rotations, rank-1	update of complex upper triangular matrix	F06TPF
	Rank- $k$ update of real symmetric matrix	F06YPF
	Rank- $2k$ update of real symmetric matrix	F06YRF
QR factorization by sequence of plane rotations, rank-1	update of real upper triangular matrix	F06QPF
Combined measurement and time	update, one iteration of Kalman filter, time-invariant,...	G13EBF
Combined measurement and time	update, one iteration of Kalman filter, time-varying,...	G13EAF
	Rank-1 update, real rectangular matrix	F06PMF
	Rank-1 update, real symmetric matrix	F06PPF
	Rank-2 update, real symmetric matrix	F06PRF
	Rank-1 update, real symmetric packed matrix	F06PQF
	Rank-2 update, real symmetric packed matrix	F06PSF
	Update solution of real symmetric positive-definite Toeplitz system	F04MFF
	Update solution of the Yule-Walker equations for real symmetric...	F04MEF
Univariate time series,	update state set for forecasting	G13AGF
Multivariate time series,	update state set for forecasting from multi-input model	G13BGF
...parameters and general linear regression model from	updated model	G02DDF
	Multivariate time series, updates forecasts and their standard errors	G13DKF
	Computes upper and lower tail probabilities and probability density...	G01EEF
Orthogonal reduction of real general matrix to	upper Hessenberg form	F08NEF
Unitary reduction of complex general matrix to	upper Hessenberg form	F08NSF
QR or RQ factorization by sequence of plane rotations, real	upper Hessenberg matrix	F06QRF
QR or RQ factorization by sequence of plane rotations, complex	upper Hessenberg matrix	F06TRF
Selected right and/or left eigenvectors of real	upper Hessenberg matrix by inverse iteration	F08PKF
Selected right and/or left eigenvectors of complex	upper Hessenberg matrix by inverse iteration	F08PXF
	Compute upper Hessenberg matrix by sequence of plane rotations,...	F06TVF
	Compute upper Hessenberg matrix by sequence of plane rotations,...	F06QVF
Eigenvalues and Schur factorization of complex	upper Hessenberg matrix reduced from complex general matrix	F08PSF
Eigenvalues and Schur factorization of real	upper Hessenberg matrix reduced from real general matrix	F08PEF
Left and right eigenvectors of real	upper quasi-triangular matrix	F08QKF
...selected eigenvalues and eigenvectors of real	upper quasi-triangular matrix	F08QLF
Solve real Sylvester matrix equation $AX + XB = C$ , $A$ and $B$ are	upper quasi-triangular or transposes	F08QHF
QR or RQ factorization by sequence of plane rotations, real	upper spiked matrix	F06QSF
QR or RQ factorization by sequence of plane rotations, complex	upper spiked matrix	F06TSF
	Compute upper spiked matrix by sequence of plane rotations,...	F06TWF
	Compute upper spiked matrix by sequence of plane rotations,...	F06QWF
RQ factorization of complex $m$ by $n$	upper trapezoidal matrix ( $m \leq n$ )	F01RGF
RQ factorization of real $m$ by $n$	upper trapezoidal matrix ( $m \leq n$ )	F01QGF
...sequence of plane rotations, rank-1 update of real	upper triangular matrix	F06QPF
...Hessenberg matrix by sequence of plane rotations, real	upper triangular matrix	F06QVF
Compute upper spiked matrix by sequence of plane rotations, real	upper triangular matrix	F06QWF
...of plane rotations, rank-1 update of complex	upper triangular matrix	F06TPF
...matrix by sequence of plane rotations, complex	upper triangular matrix	F06TVF
...matrix by sequence of plane rotations, complex	upper triangular matrix	F06TWF
Left and right eigenvectors of complex	upper triangular matrix	F08QXF
...selected eigenvalues and eigenvectors of complex	upper triangular matrix	F08QYF
QR factorization by sequence of plane rotations, real	upper triangular matrix augmented by a full row	F06QQF
QR factorization by sequence of plane rotations, complex	upper triangular matrix augmented by a full row	F06TQF
	SVD of real upper triangular matrix (Black Box)	F02WUF
	SVD of complex upper triangular matrix (Black Box)	F02XUF
...matrix equation $AX + XB = C$ , $A$ and $B$ are	upper triangular or conjugate-transposes	F08QVF
QR factorization of $UZ$ or RQ factorization of $ZU$ , $U$ real	upper triangular, $Z$ a sequence of plane rotations	F06QTF
QR factorization of $UZ$ or RQ factorization of $ZU$ , $U$ complex	upper triangular, $Z$ a sequence of plane rotations	F06TTF
	...terms in conservative form, method of lines, upwind scheme using numerical flux function based on Riemann...	D03PFF
...conservative form, coupled DAEs, method of lines, upwind scheme using numerical flux function based on Riemann...	upwind scheme using numerical flux function based on Riemann...	D03PLF
...conservative form, coupled DAEs, method of lines, upwind scheme using numerical flux function based on Riemann...	upwind scheme using numerical flux function based on Riemann...	D03PSF
	Input/output utilities	X04
	...mean of a single sample with estimates of their variance	G07DDF
	Analysis of variance, complete factorial design, treatment means and...	G04CAF
	Analysis of variance, general row and column design, treatment means and...	G04BCF
	Two-way analysis of variance, hierarchical classification, subgroups of unequal size	G04AGF
	Friedman two-way analysis of variance on $k$ matched samples	G08AEF
	Kruskal-Wallis one-way analysis of variance on $k$ samples of unequal size	G08AFF
	Analysis of variance, randomized block or completely randomized design,...	G04BBF
	Mean, variance, skewness, kurtosis, etc, one variable, from frequency table	G01ADF
	Mean, variance, skewness, kurtosis, etc, one variable, from raw data	G01AAF
	Mean, variance, skewness, kurtosis, etc, two variables, from raw data	G01ABF
Computes Mahalanobis squared distances for group or pooled	variance-covariance matrices (for use after G03DAF)	G03DBF
Normal scores, approximate	variance-covariance matrix	G01DCF
...correlation/variance-covariance matrix from correlation/variance-covariance matrix computed by G02BXF	variance-covariance matrix computed by G02BXF	G02BYF
	Robust regression, variance-covariance matrix following G02HDF	G02HFF
	Computes partial correlation/variance-covariance matrix from correlation/variance-covariance...	G02BYF
	Performs canonical variate analysis	G03ACF
	Generates a vector of pseudo-random variates from von Mises distribution	G05FSF
Generates a realisation of a multivariate time series from a	VARMA model	G05HDF
Multivariate time series, estimation of	VARMA model	G13DCF
	Broadcast scalar into integer vector	F06DBF
	Copy integer vector	F06DFE
	Add scalar times real vector to real vector	F06ECF
	Copy real vector	F06EFF
	Compute Euclidean norm of real vector	F06EJF
Add scalar times real sparse vector to real sparse vector	real sparse vector	F06ETF
	Gather real sparse vector	F06EUF
Gather and set to zero real sparse vector	real sparse vector	F06EVF
	Scatter real sparse vector	F06EWF
	Broadcast scalar into real vector	F06FBF
Multiply real vector by scalar, preserving input	vector	F06FDF
	Negate real vector	F06FGF
	Compute weighted Euclidean norm of real vector	F06FKF
	Add scalar times complex vector to complex vector	F06GCF
	Copy complex vector	F06GFF
Add scalar times complex sparse vector to complex sparse vector	complex sparse vector	F06GTF
	Gather complex sparse vector	F06GUF
	Gather and set to zero complex sparse vector	F06GVF

Scatter complex sparse <b>vector</b>	F06GWF
Broadcast scalar into complex <b>vector</b>	F06HBF
Multiply complex vector by complex scalar, preserving input <b>vector</b>	F06HDF
Negate complex <b>vector</b>	F06HGF
Compute Euclidean norm of complex <b>vector</b>	F06JFF
Multiply complex vector by real scalar, preserving input <b>vector</b>	F06KDF
Copy real vector to complex <b>vector</b>	F06KFF
Last non-negligible element of real <b>vector</b>	F06KLF
Rank-1 update, complex rectangular matrix, unconjugated <b>vector</b>	F06SMF
Rank-1 update, complex rectangular matrix, conjugated <b>vector</b>	F06SNF
Pseudo-random permutation of an integer <b>vector</b>	G05EHF
Pseudo-random sample from an integer <b>vector</b>	G05EJF
Pseudo-random integer from reference <b>vector</b>	G05EYF
Pseudo-random multivariate Normal vector from reference <b>vector</b>	G05EZF
Rearrange a <b>vector</b> according to given ranks, character data	M01ECF
Rearrange a <b>vector</b> according to given ranks, complex numbers	M01EDF
Rearrange a <b>vector</b> according to given ranks, integer numbers	M01EBF
Rearrange a <b>vector</b> according to given ranks, real numbers	M01EAF
Calculates the zeros of a <b>vector</b> autoregressive (or moving average) operator	G13DXF
Multiply complex <b>vector</b> by complex diagonal matrix	F06HCF
Multiply complex <b>vector</b> by complex scalar	F06GDF
Multiply complex <b>vector</b> by complex scalar, preserving input vector	F06HDF
Multiply real <b>vector</b> by diagonal matrix	F06FCF
Multiply complex <b>vector</b> by real diagonal matrix	F06KCF
Multiply complex <b>vector</b> by real scalar	F06JDF
Multiply complex <b>vector</b> by real scalar, preserving input vector	F06KDF
Multiply real <b>vector</b> by scalar	F06EDF
Multiply real <b>vector</b> by scalar, preserving input vector	F06FDF
Sort a <b>vector</b> , character data	M01CCF
Rank a <b>vector</b> , character data	M01DCF
Dot product of two complex sparse <b>vector</b> , conjugated	F06GSF
Index, real <b>vector</b> element with largest absolute value	F06JLF
Index, complex <b>vector</b> element with largest absolute value	F06JMF
Sum absolute values of real <b>vector</b> elements	F06EKF
Sum absolute values of complex <b>vector</b> elements	F06JKF
Generate next term from reference <b>vector</b> for ARMA time series model	G05EWF
Set up reference <b>vector</b> for generating pseudo-random integers, binomial distribution	G05EDF
Set up reference <b>vector</b> for generating pseudo-random integers,...	G05EFF
Set up reference <b>vector</b> for generating pseudo-random integers,...	G05EEF
Set up reference <b>vector</b> for generating pseudo-random integers, Poisson distribution	G05ECF
Set up reference <b>vector</b> for generating pseudo-random integers, uniform distribution	G05EBF
Set up reference <b>vector</b> for multivariate Normal distribution	G05EAF
Set up reference <b>vector</b> for univariate ARMA time series model	G05EGF
Pseudo-random multivariate Normal <b>vector</b> from reference vector	G05EZF
Set up reference <b>vector</b> from supplied cumulative distribution function or...	G05EXF
Update Euclidean norm of real <b>vector</b> in scaled form	F06FJF
Update Euclidean norm of complex <b>vector</b> in scaled form	F06KJF
Sort a <b>vector</b> , integer numbers	M01CBF
Rank a <b>vector</b> , integer numbers	M01DBF
...finite interval, variant of D01AJF efficient on <b>vector</b> machines	D01ATF
...finite interval, variant of D01AKF efficient on <b>vector</b> machines	D01AUF
...number-theoretic method, variant of D01GCF efficient on <b>vector</b> machines	D01GDF
Real sparse nonsymmetric matrix <b>vector</b> multiply	F11XAF
Real sparse symmetric matrix <b>vector</b> multiply	F11XEF
Complex sparse Hermitian matrix <b>vector</b> multiply	F11XSF
Complex sparse non-Hermitian matrix <b>vector</b> multiply	F11XNF
Evaluation of fitted bicubic spline at a <b>vector</b> of points	E02DEF
Generates a <b>vector</b> of pseudo-random numbers from a beta distribution	G05FEF
Generates a <b>vector</b> of pseudo-random numbers from a gamma distribution	G05FFF
Generates a <b>vector</b> of pseudo-random variates from von Mises distribution	G05FSF
Generates a <b>vector</b> of random numbers from a Normal distribution	G05FDF
Generates a <b>vector</b> of random numbers from a uniform distribution	G05FAF
Generates a <b>vector</b> of random numbers from an (negative) exponential distribution	G05FBF
Matrix- <b>vector</b> product, complex Hermitian band matrix	F06SDF
Matrix- <b>vector</b> product, complex Hermitian matrix	F06SCF
Matrix- <b>vector</b> product, complex Hermitian packed matrix	F06SEF
Matrix- <b>vector</b> product, complex rectangular band matrix	F06SBF
Matrix- <b>vector</b> product, complex rectangular matrix	F06SAF
Matrix- <b>vector</b> product, complex triangular band matrix	F06SGF
Matrix- <b>vector</b> product, complex triangular matrix	F06SFF
Matrix- <b>vector</b> product, complex triangular packed matrix	F06SHF
Matrix- <b>vector</b> product, real rectangular band matrix	F06PBF
Matrix- <b>vector</b> product, real rectangular matrix	F06PAF
Matrix- <b>vector</b> product, real symmetric band matrix	F06PDF
Matrix- <b>vector</b> product, real symmetric matrix	F06PCF
Matrix- <b>vector</b> product, real symmetric packed matrix	F06PEF
Matrix- <b>vector</b> product, real triangular band matrix	F06PGF
Matrix- <b>vector</b> product, real triangular matrix	F06PFF
Matrix- <b>vector</b> product, real triangular packed matrix	F06PHF
Sort a <b>vector</b> , real numbers	M01CAF
Rank a <b>vector</b> , real numbers	M01DAF
Add scalar times complex sparse <b>vector</b> to complex sparse vector	F06GTF
Add scalar times complex <b>vector</b> to complex vector	F06GCF
Copy real <b>vector</b> to complex vector	F06KFF
Add scalar times real sparse <b>vector</b> to real sparse vector	F06ETF
Add scalar times real <b>vector</b> to real vector	F06ECF
Dot product of two complex sparse <b>vector</b> , unconjugated	F06GRF
Elements of real <b>vector</b> with largest and smallest absolute value	F06FLF
Circular convolution or correlation of two complex <b>vectors</b>	C06PKF
Dot product of two real <b>vectors</b>	F06EAF
Swap two real <b>vectors</b>	F06EGF
Dot product of two real sparse <b>vectors</b>	F06ERF
Apply plane rotation to two real sparse <b>vectors</b>	F06EXF
Compute cosine of angle between two real <b>vectors</b>	F06FAF
Apply real symmetric plane rotation to two <b>vectors</b>	F06FPF
Swap two complex <b>vectors</b>	F06GGF
Apply real plane rotation to two complex <b>vectors</b>	F06KPF
Service routines for multiple linear regression, select elements from <b>vectors</b> and matrices	G02CEF
Service routines for multiple linear regression, re-order elements of <b>vectors</b> and matrices	G02CFF
Dot product of two complex <b>vectors</b> , conjugated	F06GBF
Circular convolution or correlation of two real <b>vectors</b> , extra workspace for greater speed	C06KFF
Circular convolution or correlation of two real <b>vectors</b> , no extra workspace	C06EKF
Gram-Schmidt orthogonalisation of $n$ <b>vectors</b> of order $m$	F05AAF
Dot product of two complex <b>vectors</b> , unconjugated	F06GAF
Nonlinear <b>Volterra</b> convolution equation, second kind	D05BAF
Generate weights for use in solving <b>Volterra</b> equations	D05BWF
Nonlinear convolution <b>Volterra-Abel</b> equation, first kind, weakly singular	D05BEF
Nonlinear convolution <b>Volterra-Abel</b> equation, second kind, weakly singular	D05BDF
Computes probability for von Mises distribution	G01ERF
Generates a vector of pseudo-random variates from von Mises distribution	G05FSF
Shapiro and Wilk's $W$ test for Normality	G01DDF

Update solution of the Yule–Walker equations for real symmetric positive-definite Toeplitz...	F04MEF
Solution of the Yule–Walker equations for real symmetric positive-definite Toeplitz...	F04FEF
Kruskal–Wallis one-way analysis of variance on $k$ samples of unequal size	G08AFF
Computes bounds for the significance of a Durbin–Watson statistic	G01EPF
Computes Durbin–Watson test statistic	G02FCF
Nonlinear convolution Volterra–Abel equation, second kind, <b>weakly</b> singular	D05BDF
Nonlinear convolution Volterra–Abel equation, first kind, <b>weakly</b> singular	D05BEF
Generate weights for use in solving <b>weakly</b> singular Abel-type equations	D05BYF
Inverse Laplace transform, modified <b>Weeks'</b> method	C06LBF
Pseudo-random real numbers, <b>Weibull</b> distribution	G05DPF
Computes maximum likelihood estimates for parameters of the <b>Weibull</b> distribution	G07BEF
Calculates a robust estimation of a correlation matrix, Huber's <b>weight</b> function	G02HKF
...estimation of a correlation matrix, user-supplied <b>weight</b> function	G02HMF
One-dimensional quadrature, adaptive, finite interval, <b>weight</b> function $1/(x - c)$ , Cauchy principal value...	D01AQF
One-dimensional quadrature, adaptive, finite interval, <b>weight</b> function $\cos(\omega x)$ or $\sin(\omega x)$	D01ANF
One-dimensional quadrature, adaptive, semi-infinite interval, <b>weight</b> function $\cos(\omega x)$ or $\sin(\omega x)$	D01ASF
...estimation of a correlation matrix, user-supplied <b>weight</b> function plus derivatives	G02HLF
One-dimensional quadrature, adaptive, finite interval, <b>weight</b> function with end-point singularities of...	D01APF
... $M$ -estimates for location and scale parameters, standard <b>weight</b> functions	G07DBF
...for location and scale parameters, user-defined <b>weight</b> functions	G07DCF
Computes (optionally <b>weighted</b> ) correlation and covariance matrices	G02BXF
Compute <b>weighted</b> Euclidean norm of real vector	F06FKF
Real general Gauss–Markov linear model (including <b>weighted</b> least-squares)	F04JLF
Complex general Gauss–Markov linear model (including <b>weighted</b> least-squares)	F04KLF
ODEs, IVP, <b>weighted</b> norm of local error estimate for D02M–N routines	D02ZAF
Computes a <b>weighted</b> sum of squares matrix	G02BUF
Update a <b>weighted</b> sum of squares matrix with a new observation	G02BTF
...compute regression with user-supplied functions and <b>weights</b>	G02HDF
Calculation of <b>weights</b> and abscissae for Gaussian quadrature rules,...	D01BCF
Pre-computed <b>weights</b> and abscissae for Gaussian quadrature rules,...	D01BBF
Generate <b>weights</b> for use in solving Volterra equations	D05BWF
Generate <b>weights</b> for use in solving weakly singular Abel-type equations	D05BYF
Robust regression, compute <b>weights</b> for use with G02HDF	G02HBF
Constructs a box and <b>whisker</b> plot	G01ASF
Multivariate time series, filtering (pre- <b>whitening</b> ) by an ARIMA model	G13BAF
Computes the exact probabilities for the Mann–Whitney $U$ statistic, no ties in pooled sample	G08AJF
Computes the exact probabilities for the Mann–Whitney $U$ statistic, ties in pooled sample	G08AKF
Performs the Mann–Whitney $U$ test on two independent samples	G08AHF
Performs the <b>Wilcoxon</b> one-sample (matched pairs) signed rank test	G08AGF
Shapiro and <b>Wilk's</b> $W$ test for Normality	G01DDF
...using rectangular, Bartlett, Tukey or Parzen lag <b>window</b>	G13CAF
...smoothing by the trapezium frequency (Daniell) <b>window</b>	G13CBF
...using rectangular, Bartlett, Tukey or Parzen lag <b>window</b>	G13CCF
...smoothing by the trapezium frequency (Daniell) <b>window</b>	G13CDF
Computes a trimmed and <b>winsorized</b> mean of a single sample with estimates of their variance	G07DDF
<b>Write</b> formatted record to external file	X04BAF
Computes probabilities for $\chi^2$ distribution	G01ECF
Computes deviates for the $\chi^2$ distribution	G01FCF
Computes probabilities for the non-central $\chi^2$ distribution	G01GCF
Pseudo-random real numbers, $\chi^2$ distribution	G05DHF
Performs the $\chi^2$ goodness of fit test, for standard continuous distributions	G08CGF
Multivariate time series, sample partial lag correlation matrices, $\chi^2$ statistics and significance levels	G13DNF
$\chi^2$ statistics for two-way contingency table	G11AAF
Computes probability for a positive linear combination of $\chi^2$ variables	G01JCF
...probability for a linear combination of (central) $\chi^2$ variables	G01JDF
Two-way contingency table analysis, with $\chi^2$ / <b>Fisher's</b> exact test	G01AFF
Update solution of the Yule–Walker equations for real symmetric positive-definite...	F04MEF
Solution of the Yule–Walker equations for real symmetric positive-definite...	F04FEF
Correlation-like coefficients (about <b>zero</b> ), all variables, casewise treatment of missing values	G02BEF
Correlation-like coefficients (about <b>zero</b> ), all variables, no missing values	G02BDF
Correlation-like coefficients (about <b>zero</b> ), all variables, pairwise treatment of missing values	G02BFF
Gather and set to <b>zero</b> complex sparse vector	F06GVF
<b>Zero</b> in given interval of continuous function by Bus and Dekker...	C05AZF
ODEs, IVP, Runge–Kutta method, until function of solution is <b>zero</b> , integration over range with intermediate output (simple driver)	D02BJF
ODEs, IVP, Adams method, until function of solution is <b>zero</b> , intermediate output (simple driver)	D02CJF
ODEs, stiff IVP, BDF method, until function of solution is <b>zero</b> , intermediate output (simple driver)	D02EJF
<b>Zero</b> of continuous function, Bus and Dekker algorithm,...	C05AGF
<b>Zero</b> of continuous function by continuation method,...	C05AXF
<b>Zero</b> of continuous function, continuation method,...	C05AJF
<b>Zero</b> of continuous function in given interval, Bus and Dekker...	C05ADF
Binary search for interval containing <b>zero</b> of continuous function (reverse communication)	C05AVF
Gather and set to <b>zero</b> real sparse vector	F06EVF
...Runge–Kutta–Merson method, until function of solution is <b>zero</b> (simple driver)	D02BHF
Correlation-like coefficients (about <b>zero</b> ), subset of variables, casewise treatment of missing values	G02BLF
Correlation-like coefficients (about <b>zero</b> ), subset of variables, no missing values	G02BKF
Correlation-like coefficients (about <b>zero</b> ), subset of variables, pairwise treatment of missing values	G02BMF
Calculates the <b>zeros</b> of a vector autoregressive (or moving average) operator	G13DXF
All <b>zeros</b> of complex polynomial, modified Laguerre method	C02AFF
All <b>zeros</b> of complex quadratic	C02AHF
All <b>zeros</b> of real polynomial, modified Laguerre method	C02AGF
All <b>zeros</b> of real quadratic	C02AJF