## MATRIX—END MATRIX

This command is not available on all operating systems.

MATRIX

matrix statements

END MATRIX

The following matrix language statements can be used in a matrix program:

**BREAK** DO IF **END LOOP MSAVE** SAVE CALL ELSE **GET** PRINT WRITE COMPUTE **ELSE IF** LOOP READ DISPLAY **END IF MGET** RELEASE

The following functions can be used in matrix language statements:

ABS Absolute values of matrix elements
ALL Test if all elements are positive
ANY Test if any element is positive
ARSIN Arc sines of matrix elements
ARTAN Arc tangents of matrix elements
BLOCK Create block diagonal matrix

CDFNORM Cumulative normal distribution function

CHICDF Cumulative chi-squared distribution function

CHOL Cholesky decomposition

CMAX Column maxima
CMIN Column minima

COS Cosines of matrix elements
CSSQ Column sums of squares

CSUM Column sums

DESIGN Create design matrix

DET Determinant

DIAG Diagonal of matrix EOF Check end of file

EVAL Eigenvalues of symmetric matrix
EXP Exponentials of matrix elements
FCDF Cumulative F distribution function

GINV Generalized inverse

GRADE Rank elements in matrix, using sequential integers for ties

GSCH Gram-Schmidt orthonormal basis

IDENT Create identity matrix

INV Inverse

KRONECKER Kronecker product of two matrices

LG10 Logarithms to base 10 of matrix elements

LN Logarithms to base e of matrix elements

MAGIC Create magic square

MAKE Create a matrix with all elements equal MDIAG Create a matrix with the given diagonal

MMAX Maximum element in matrix
MMIN Minimum element in matrix
MOD Remainders after division
MSSQ Matrix sum of squares

MSUM Matrix sum

NCOL Number of columns
NROW Number of rows
RANK Matrix rank

RESHAPE Change shape of matrix

RMAX Row maxima
RMIN Row minima

RND Round off matrix elements to nearest integer RNKORDER Rank elements in matrix, averaging ties

RSSQ Row sums of squares

RSUM Row sums

SIN Sines of matrix elements

SOLVE Solve systems of linear equations
SQRT Square roots of matrix elements
SSCP Sums of squares and cross-products

SVAL Singular values

SWEEP Perform sweep transformation T (Synonym for TRANSPOS)

TCDF Cumulative normal t distribution function

TRACE Calculate trace (sum of diagonal elements)

TRANSPOS Transposition of matrix

TRUNC Truncation of matrix elements to integer
UNIFORM Create matrix of uniform random numbers