

SPSS Compute Command Syntax (Matrix Language)

COMPUTE matrix = expression

Arithmetic operators used in expressions:

+	Addition
-	Subtraction
*	Matrix multiplication
/	Matrix division
&*	Elementwise multiplication
&/	Elementwise division
**	Matrix exponentiation
&**	Elementwise exponentiation

Matrix functions:

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 function	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
GSCH	Gram-Schmidt orthonormal basis
IDENT	Create identity matrix
INV	Inverse
KRONEKER	Kroneker product of two matrices
LG10 elements	Logarithms to base 10 of matrix elements
LN elements	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 integer	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