

Contents

[M-5] Manual entry Function Purpose

Unit & constant matrices

I()	I()	identity matrix
e()	e()	unit vectors
J()	J()	matrix of constants
designmatrix()	designmatrix()	design matrices

Block-diagonal matrices

blockdiag()	blockdiag()	block-diagonal matrix
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Ranges

range()	range() rangen()	vector over specified range vector of n over specified range
unitcircle()	unitcircle()	unit circle on complex plane

Random

runiform()	runiform() rnormal()	uniform random variates normal (Gaussian) random variates
	rbeta() rbinomial() rchi2() rdiscrete() rexponential() rgamma() rhypergeometric() rlogistic() rnbinoimial() rpoisson() rt() runiformint() rweibull() rweibullph()	beta random variates binomial random variates χ^2 random variates discrete random variates exponential random variates gamma random variates hypergeometric random variates logistic random variates negative binomial random variates Poisson random variates Student's <i>t</i> random variates uniform random integer variates Weibull random variates Weibull (proportional hazards) random variates

Named matrices

Hilbert()	Hilbert() invHilbert()	Hilbert matrices inverse Hilbert matrices
Toeplitz()	Toeplitz()	Toeplitz matrices
Vandermonde()	Vandermonde()	Vandermonde matrices

vec() & vech() transforms

Dmatrix()	Dmatrix()	duplication matrices
Kmatrix()	Kmatrix()	commutation matrices
Lmatrix()	Lmatrix()	elimination matrices

Description

The functions above create standard matrices such as the identity matrix, etc.

Remarks and examples

For other mathematical functions, see

[M-4] Matrix	Matrix mathematical functions
[M-4] Scalar	Scalar mathematical functions
[M-4] Mathematical	Important mathematical functions

Also see

[M-4] **Intro** — Categorical guide to Mata functions

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