

## Description

`sqrt(Z)` returns the elementwise square root of  $Z$ .

## Syntax

*numeric matrix* `sqrt(numeric matrix Z)`

## Conformability

`sqrt(Z)`

*Z*:  $r \times c$   
*result*:  $r \times c$

## Diagnostics

`sqrt(Z)` returns missing when  $Z$  is real and  $Z < 0$ ; that is, `sqrt(-4) = .` but `sqrt(-4+0i) = 2i`.

## Also see

[M-5] [cholesky\(\)](#) — Cholesky square-root decomposition

[M-4] [Scalar](#) — Scalar mathematical functions

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