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**sqrt()** — Square root

Description Syntax Conformability Diagnostics Also see

### **Description**

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

# **Syntax**

numeric matrix sqrt(numeric matrix Z)

# Conformability

```
z: r \times c
r \times c
r \times c
```

# **Diagnostics**

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

### Also see

```
    [M-5] cholesky() — Cholesky square-root decomposition
    [M-4] Scalar — Scalar mathematical functions
```

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