

Description

`floatround(x)` returns x rounded to IEEE 4-byte real (float) precision. `floatround()` is the element-by-element equivalent of Stata's `float()` function. The Mata function could not be named `float()` because the word `float` is reserved in Mata.

Syntax

real matrix `floatround(real matrix x)`

Remarks and examples

```
: printf(" %21x\n", .1)
+1.999999999999999aX-004
: printf(" %21x\n", floatround(.1))
+1.99999a0000000X-004
```

Conformability

```
floatround(x):
  x:          r × c
result:      r × c
```

Diagnostics

`floatround(x)` returns missing (`.`) if $x < -1.ffffeX+7e$ (approximately $-1.70141173319e+38$) or $x > 1.ffffeX+7e$ (approximately $1.70141173319e+38$).

In contrast with most functions, `floatround(x)` returns the same kind of missing value as x if x contains missing; `.` if $x == .$, `.a` if $x == .a$, `.b` if $x == .b$, `...`, and `.z` if $x == .z$.

Also see

[M-4] **Utility** — Matrix utility functions

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