

Description

`dsign(a, b)` returns *a* with the sign of *b*, defined as $|a|$ if $b \geq 0$ and $-|a|$ otherwise.

This function is useful when translating FORTRAN programs.

The in-line construction

```
(b >= 0 ? abs(a) : -abs(a))
```

is clearer. Also, differentiate carefully between what `dsign()` returns (equivalent to the above construction) and `signum(b)*abs(a)`, which is almost equivalent but returns 0 when *b* is 0 rather than `abs(a)`. (Message: `dsign()` is not one of our favorite functions.)

Syntax

```
real scalar dsign(real scalar a, real scalar b)
```

Conformability

`dsign(a, b):`

<i>a</i> :	1×1
<i>b</i> :	1×1
<i>result</i> :	1×1

Diagnostics

`dsign(., b)` returns . for all *b*.

`dsign(a, .)` returns `abs(a)` for all *a*.

Also see

[M-5] [sign\(\)](#) — Sign and complex quadrant functions

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

Stata, Stata Press, and Mata are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow and NetCourseNow are trademarks of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2025 StataCorp LLC, College Station, TX, USA. All rights reserved.

For suggested citations, see the FAQ on [citing Stata documentation](#).

