dsign( ) — FORTRAN-like DSIGN( ) function

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):

a:	1×1
b:	1×1
result:	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

For suggested citations, see the FAQ on citing Stata documentation.