dsign() — FORTRAN-like DSIGN() function

Description

dsigin(a, b) returns a with the sign of b, defined as |a| if b ≥ 0 and −|a| otherwise.

This function is useful when translating FORTRAN programs.

The in-line construction

\[(b \geq 0) ? \text{abs}(a) : -\text{abs}(a)\]

is clearer. Also, differentiate carefully between what dsigin() 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: dsigin() is not one of our favorite functions.)

Syntax

```stata
real scalar dsigin(real scalar a, real scalar b)
```

Conformability

dsigin(a, b):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>1 X 1</td>
</tr>
<tr>
<td>b</td>
<td>1 X 1</td>
</tr>
<tr>
<td>result</td>
<td>1 X 1</td>
</tr>
</tbody>
</table>

Diagnostics

dsigin(., b) returns . for all b.
dsigin(a, .) returns abs(a) for all a.

Also see

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

[M-4] Scalar — Scalar mathematical functions