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` FILE: pi.x
` PURPOSE: compute pi to n terms
` METHOD:  $4 \times (1 - 1/3 + 1/5 - 1/7 + 1/9 \dots)$ 
` Number of terms is input
` It takes a LOT of terms to get any accuracy at all
p2  $\leftarrow$  0.0;
i  $\leftarrow$  1;
do i < 4 $\times$ nterms  $\Rightarrow$                                 ` too high
    t  $\leftarrow$  1.0/i2r(i);
    p1  $\leftarrow$  p2+t;
    i  $\leftarrow$  i+2;
    t  $\leftarrow$  1.0/i2r(i);
    p2  $\leftarrow$  p1-t;                                    ` too low
    i  $\leftarrow$  i+2;
od;
pi  $\leftarrow$  4.0 $\times$ p2;                                     ` best result
delta  $\leftarrow$  1.0/i2r(nterms);                        ` previous increment

```