

```

` FILE: quadratic.x
` PURPOSE: solve  $ax^2 + bx + c = 0$ 
` METHOD: standard formula
` USAGE: >> xcom x/sqrt.x x/quadratic.x
` AUTHOR: Ashwin Ramaswamy
` MODS: McKeeman
if  $\neg(a \leq 0.0 \wedge a \geq 0.0) \Rightarrow$            `  $ax^2 + bx + c = 0$ 
    root  $\leftarrow$  sqrt  $\leftarrow$   $b \times b - 4.0 \times a \times c$ ;
    res1  $\leftarrow$   $-(b + \text{root}) / 2.0$ ;
    res2  $\leftarrow$   $-(b - \text{root}) / 2.0$ ;
     $\square$   $\neg(b \leq 0.0 \wedge b \geq 0.0) \Rightarrow$    `  $bx + c = 0$ 
        res1  $\leftarrow$   $-c / b$ ;
        res2  $\leftarrow$   $-c / b$ ;
fi;

```