

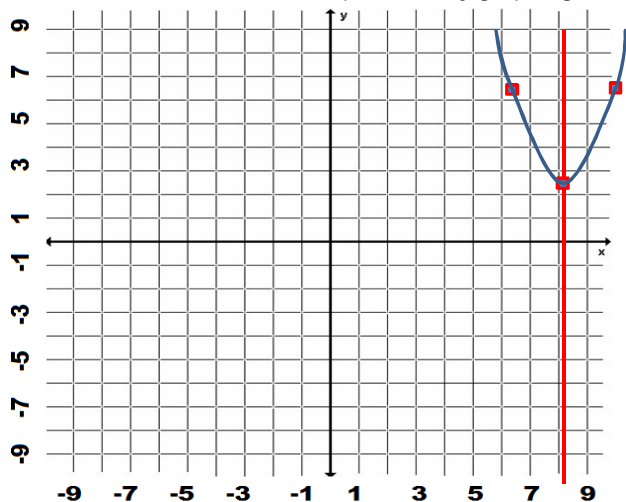
# MasterMath

Name \_\_\_\_\_

Date \_\_\_\_\_

## Solving Quadratic Equations by Graphing

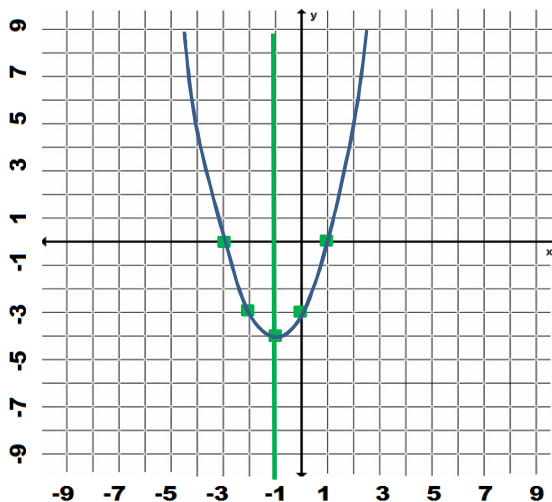
1. Please find the roots of this quadratic by graphing it:  $x^2 - 4x + 7$



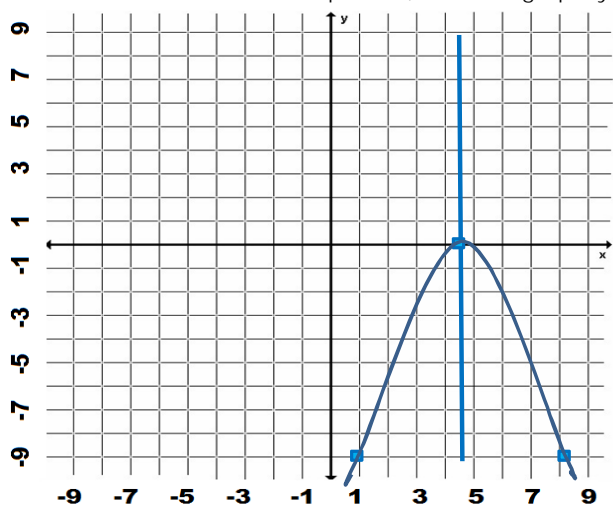
no solutions

2. Solve by graphing:  $x^2 + 2x = 3$

$x = 1$  or  $-3$



3. Write this function in Intercept form, and then graph:  $y = -x^2 + 6x - 9$



Intercept Form  
 $y = -1(x - 3)^2$

4. Estimate the zeros of this function, and then test your estimates. If your estimates are  $\frac{1}{2} > y > -\frac{1}{2}$ , that's pretty good.

| Estimated x | Test: $x^2 - 5x - 2 = y$ |
|-------------|--------------------------|
| 5.3         | -0.41                    |
| -3          | -0.41                    |

