

Name: \_\_\_\_\_ Per: \_\_\_\_\_ Date: \_\_\_\_\_  
 Keller • PreCalculus

## Parabolas – Skills Check Practice

### Classwork / Homework

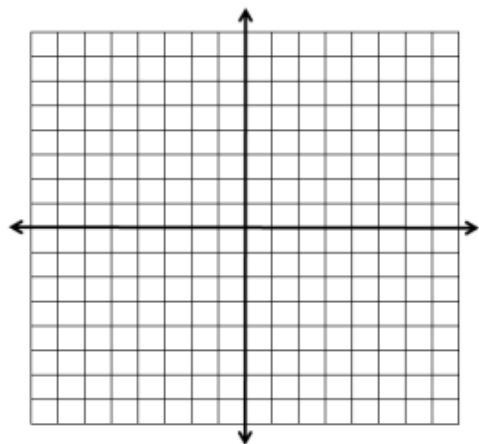
1.  $(x + 2)^2 = 4(y - 1)$

Function/ Not a Function      Opens: \_\_\_\_\_

Vertex \_\_\_\_\_      p = \_\_\_\_\_

Focal Width \_\_\_\_\_      Focus \_\_\_\_\_

Equation of Directrix \_\_\_\_\_



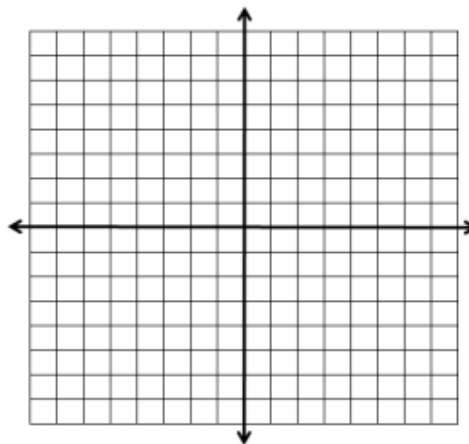
3.  $(y + 5)^2 = -12(x + 3)$

Function/ Not a Function      Opens: \_\_\_\_\_

Vertex \_\_\_\_\_      p = \_\_\_\_\_

Focal Width \_\_\_\_\_      Focus \_\_\_\_\_

Equation of Directrix \_\_\_\_\_



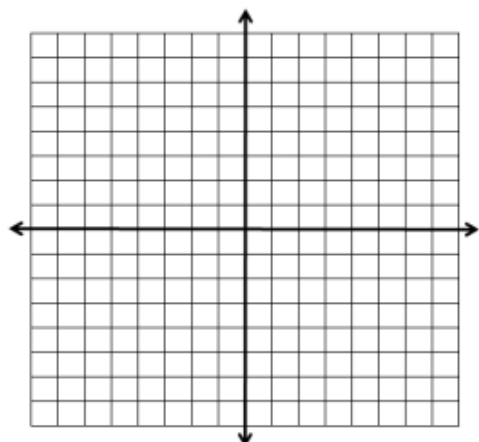
2.  $y^2 = 8(x + 1)$

Function/ Not a Function      Opens: \_\_\_\_\_

Vertex \_\_\_\_\_      p = \_\_\_\_\_

Focal Width \_\_\_\_\_      Focus \_\_\_\_\_

Equation of Directrix \_\_\_\_\_



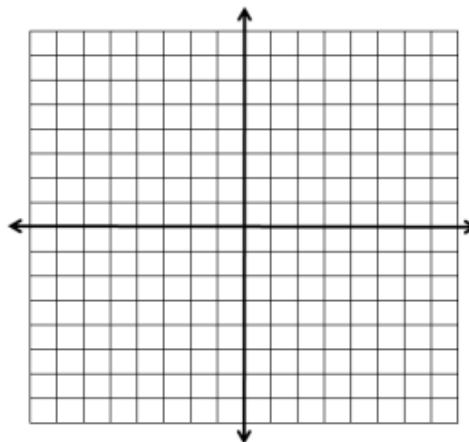
4.  $(y + 3)^2 = -8(x - 7)$

Function/ Not a Function      Opens: \_\_\_\_\_

Vertex \_\_\_\_\_      p = \_\_\_\_\_

Focal Width \_\_\_\_\_      Focus \_\_\_\_\_

Equation of Directrix \_\_\_\_\_



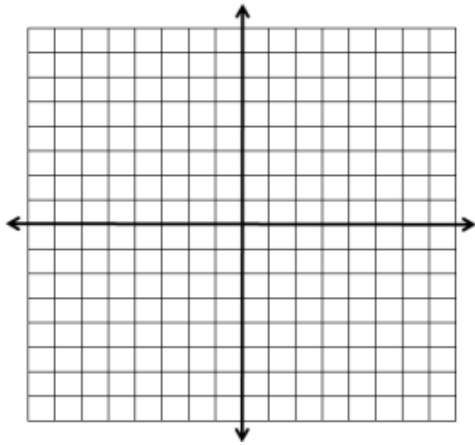
5.  $x^2 = -16(y-3)$

Function/ Not a Function      Opens: \_\_\_\_\_

Vertex \_\_\_\_\_      p = \_\_\_\_\_

Focal Width \_\_\_\_\_      Focus \_\_\_\_\_

Equation of Directrix \_\_\_\_\_



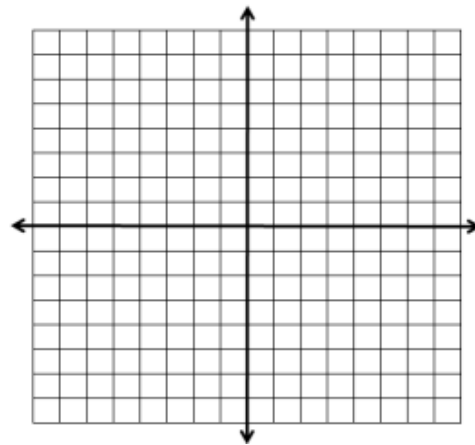
6.  $(x-2)^2 = 20y$

Function/ Not a Function      Opens: \_\_\_\_\_

Vertex \_\_\_\_\_      p = \_\_\_\_\_

Focal Width \_\_\_\_\_      Focus \_\_\_\_\_

Equation of Directrix \_\_\_\_\_



Write the equation of the Parabola with the given properties. Sketch if it helps.

7. vertex (3,7) and directrix  $y=4$

10. vertex (0,4) and focus (3,4)

8. vertex (2, -1) and directrix  $x=3$

11. focus (0,2) and directrix  $y=8$

9. vertex (-4, 2) and focus (-5, 2)

12. focus (3, -1) and directrix  $x=-5$