

14.3 Parabola Day 2 Notes

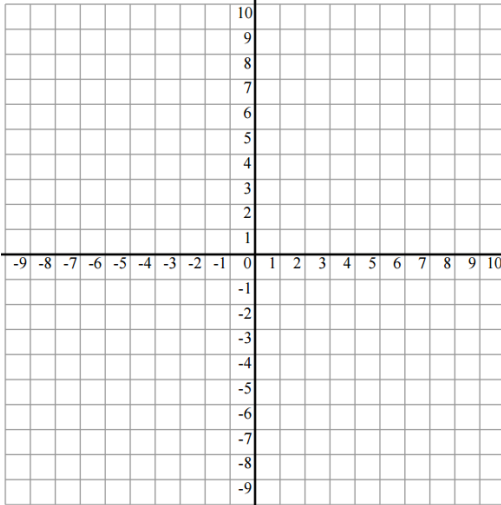
Parabola Conics Form:
Vertical: $(x-h)^2 = 4p(y-k)$
Horizontal: $(y-k)^2 = 4p(x-h)$

Given the following information, write the equation of the parabola.

1. Vertex $(-2, 5)$; $p = -1/2$;
 Vertical AOS

Equation: _____

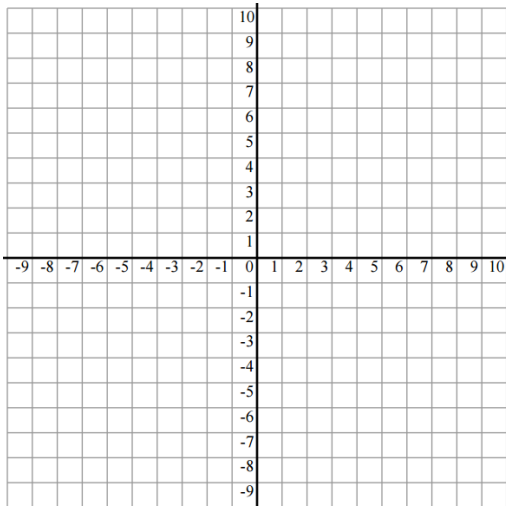
2. Vertex $(-3, 6)$ Focus $(5, 6)$



$p =$ _____

Equation: _____

3. Vertex $(2, -1)$ Directrix: $x = 5$



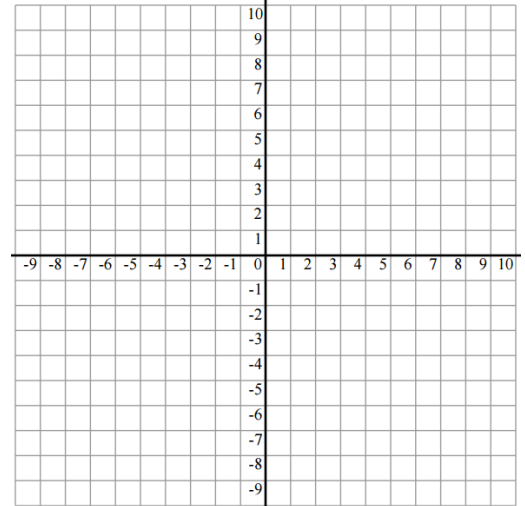
$P =$ _____

Equation: _____

4. Vertex $(6, -1)$; $p = -3$;
 Horizontal AOS

Equation: _____

5. Directrix: $y = 5$ Focus $(-3, 1)$

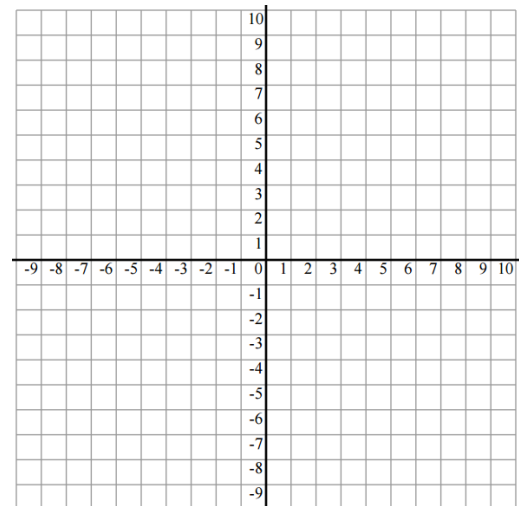


$p =$ _____

Vertex: _____

Equation: _____

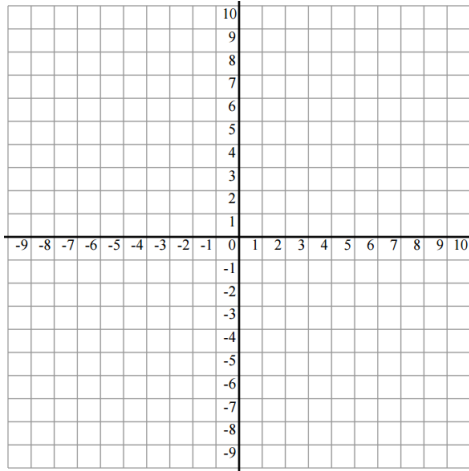
6. Vertex $(-3, -2)$ Focus $(1, -2)$



$P =$ _____

Equation: _____

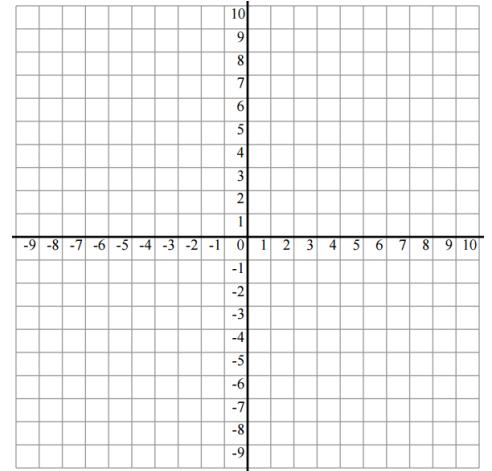
7. Vertex (4, 5) Directrix : $y = 7$



$p =$ _____

Equation: _____

8. Vertex (5, 4) Directrix : $y = 1$



$p =$ _____

Equation: _____

9. $(x-3)^2 = 12(y+1)$

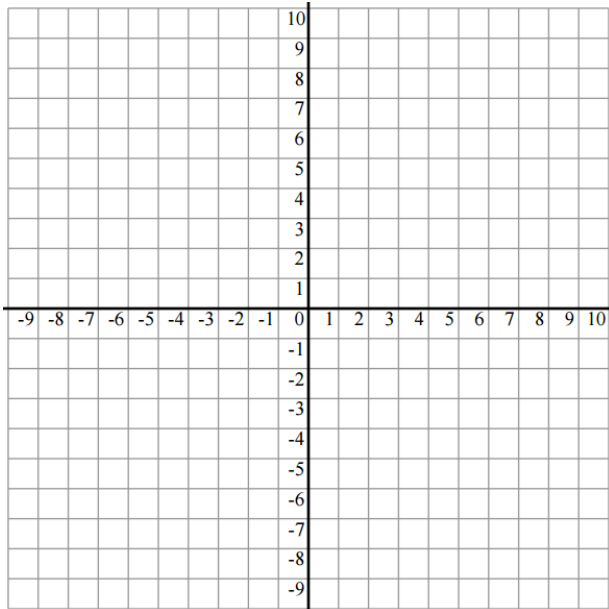
Vertex:

$p =$

Focus:

Directrix:

Axis:



10. $(y-5)^2 = -4(x-3)$

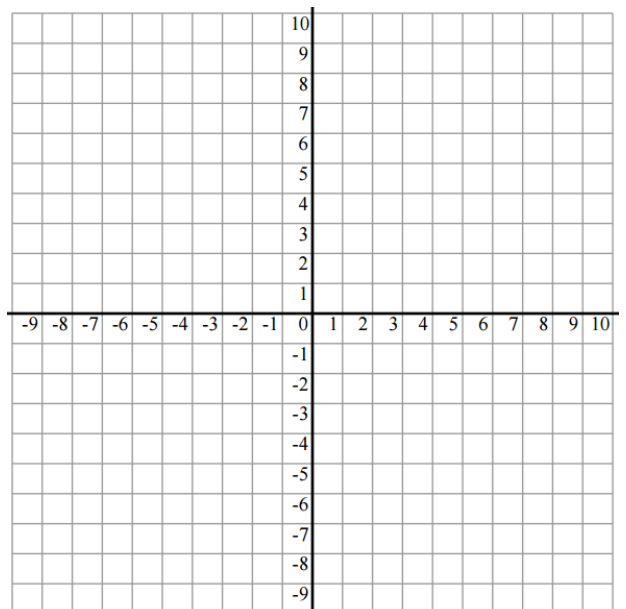
Vertex:

$p =$

Focus:

Directrix:

Axis:



Parabola Conics Form:
Vertical: $(x-h)^2 = 4p(y-k)$
Horizontal: $(y-k)^2 = 4p(x-h)$