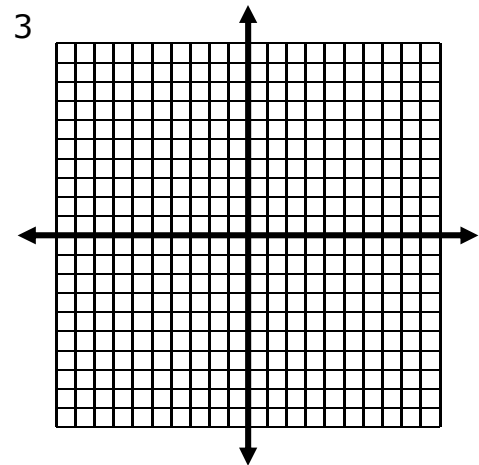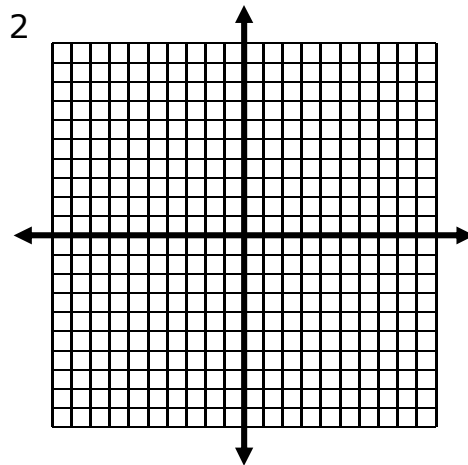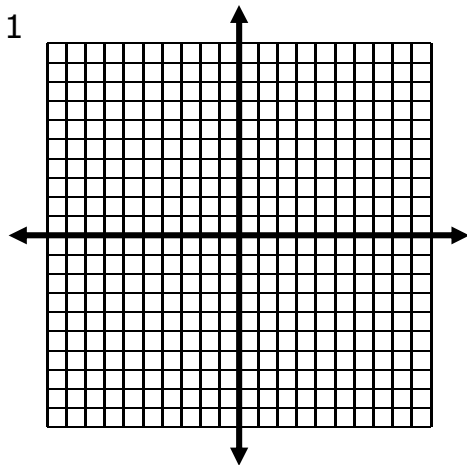# EVALUATE PARABOLAS WORKSHEET

Name _____

Problems:

| 1. $x^2 = -8y$	2. $(x-2)^2 = 24y$	3. $(y-3)^2 = -12(x-2)$

|	Direction	Vertex	AOS	Domain	Range	p	Focus	Directrix
1								
2								
3								

1

2

3

4. You have created a new laser by taking the equation $x^2 = y$ moving it right 4, down 2 and placing the focus 3 units from the vertex. What is the equation of your laser?

5. Steve Jobs has asked you to do some consulting on a secret project for Apple. The next ipod, the ipod wireless needs to have a parabola inside of it to communicate with the Apple satellite system. Mr. Jobs needs you to write the equation of a parabola with vertex at (5,1) and directrix x = 6.
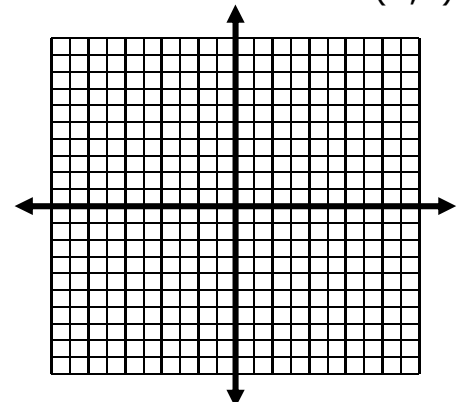
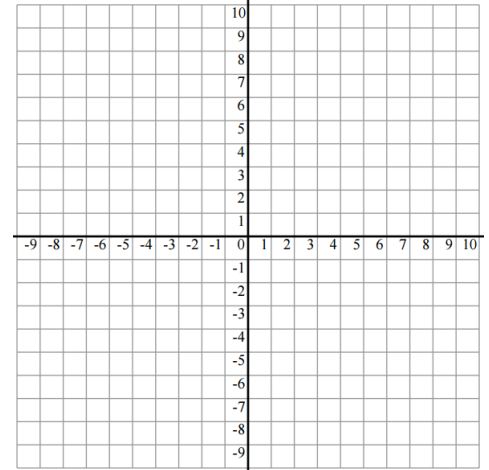Given the following information, write the equation of the parabola

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

P=_____

Equation:_____

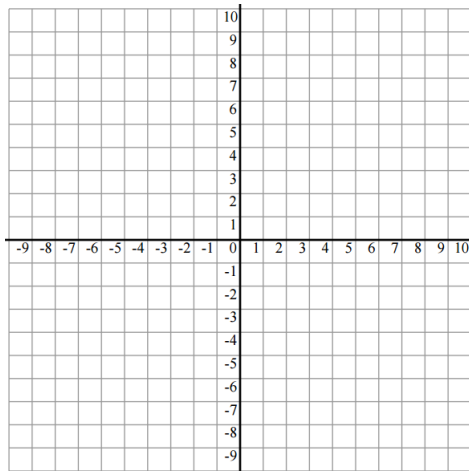7. Vertex (5, 4)   Directrix : y = 1
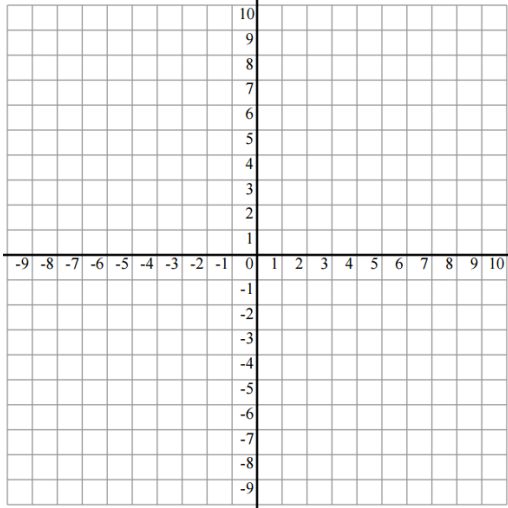
P   =_____

Equation:_____

8. Focus (4, 3)   Directrix : y = 7

p =_____

Equation:_____

Parabola Conics Form:

Vertical: $(x-h)^2 = 4p(y-k)$

Horizontal: $(y-k)^2 = 4p(x-h)$