



Conic Sections: Parabolas

11 Questions

NAME : _____

CLASS : _____

DATE : _____

1. What is the coordinate of the vertex? $(x+3)^2 = 4(y+5)$

a) (-3, -5) b) (-5, -3)
 c) (3, 5) d) (5, 3)

2. The focus is always outside the parabola

a) True b) False

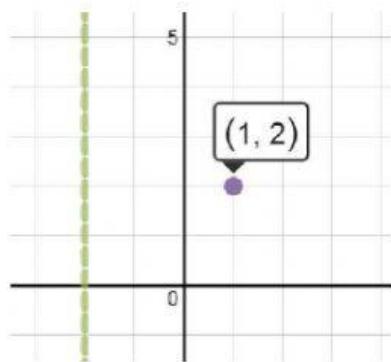
3. All parabolas with a horizontal directrix open the up or down.

a) false b) true

4. The focus is at (2,0) and the vertex is at (-4,0). What is the equation of the parabola?

a) $y^2 = 24(x+4)$ b) $(x+4)^2 = -20y$
 c) $x^2 = 16(y+4)$ d) $(y+4)^2 = -12x$

5.



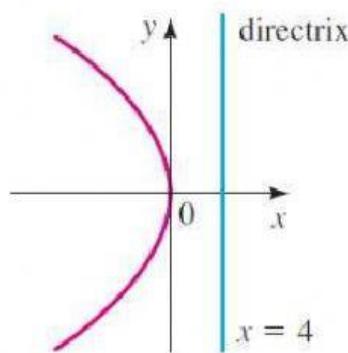
Given this **directrix** and **vertex**, what would the equation of the parabola be?

a) $(x-1)^2 = 6(y-2)$ b) $(y-2)^2 = 12(x-1)$
 c) $(x-1)^2 = 12(y-2)$ d) $(y-2)^2 = 6(x-1)$

6. **True or False?** When the y-part is squared, the parabola opens up or down.

a) True b) False

7.



What is the equation of this parabola?

a) $x^2 = -y$ b) $y^2 = x$
 c) $x^2 = 4y$ d) $y^2 = -16x$

8. What is the **VERTEX** of the parabola: $1/2(y - 4) = (x - 3)^2$

a) (-3, -4) b) (3, -4)
 c) (3, 4) d) (4, 3)

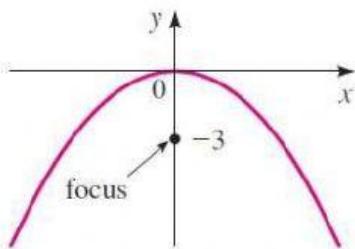
9. A parabola is the set of all points equidistant from the focus and the directrix.

a) false b) true

10. $(x - 5)^2 = 4(y - 11)$ What is the p value?

a) 10 b) 4
 c) 1 d) 40

11.



What is the equation of this parabola?

a) $x^2 = -12y$ b) $x^2 = -3y$
 c) $y^2 = 12x$ d) $y^2 = 3x$