



Conic Sections: Parabolas

11 Questions

NAME : _____

CLASS : _____

DATE : _____

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

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

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

a) true b) false

3. All parabolas with a vertical directrix open the left or right.

a) true b) false

4. **True or False?**

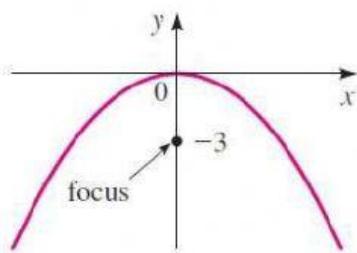
When the x-part is squared, the parabola opens up or down.

a) True b) False

5. 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) $(y+4)^2 = -12x$
 c) $x^2 = 16(y+4)$ d) $(x+4)^2 = -20y$

6.



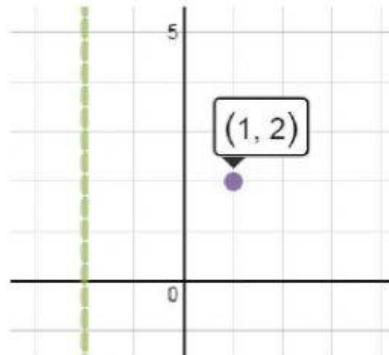
What is the equation of this parabola?

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

7. $(x - 5)^2 = 40(y - 11)$ What is the p value?

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

8.

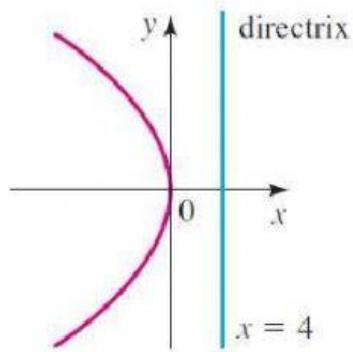
Given this **directrix** and **vertex**, what would the equation of the parabola be?

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

9. The focus is always inside the parabola

a) True b) False

10.



What is the equation of this parabola?

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

11. 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)