



Conic Sections: Parabolas

11 Questions

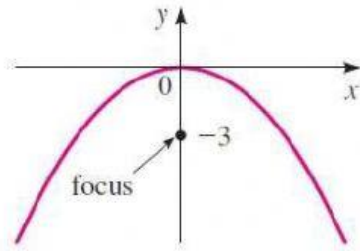
NAME : _____

CLASS : _____

DATE : _____

1. What is the VERTEX of the parabola: $\frac{1}{2}(y - 4) = (x - 3)^2$
 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) $x^2 = -3y$
- c) $x^2 = -12y$

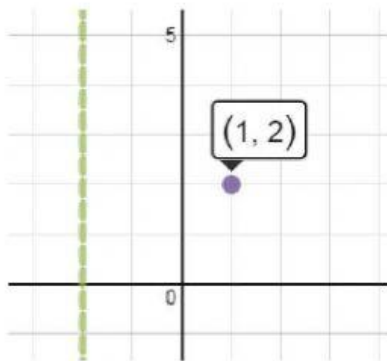
- b) $y^2 = 12x$
- d) $y^2 = 3x$

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

- a) 40
- c) 10

- b) 4
- d) 1

8.

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

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

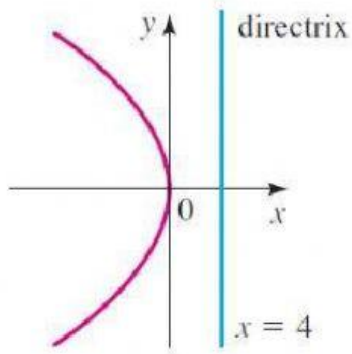
- b) $(y-2)^2 = 6(x-1)$
- d) $(x-1)^2 = 6(y-2)$

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)