

**PreCalculus**  
**WS: Pre 9.1/9.1 Quiz Review**

**Name** \_\_\_\_\_  
**Date** \_\_\_\_\_ **Block** \_\_\_\_\_

*Find the standard equation of the circle or parabola.*

1.)  $x^2 + y^2 + 6x - 4y = 3$

2.)  $y^2 - 12x + 18y + 153 = 0$

3.)  $x^2 + y^2 - 8x - 6y - 39 = 0$

4.)  $x^2 - 8x - 8y - 40 = 0$

5.)  $x^2 + y^2 - 16x + 20y + 124 = 0$

6.)  $3x^2 + 30x + y + 79 = 0$

7.)  $x^2 - 12x + 16y = 28$

8.)  $x^2 + y^2 + 6x - 4y - 15 = 0$

9.)  $y^2 + 8y + 8x + 16 = 0$

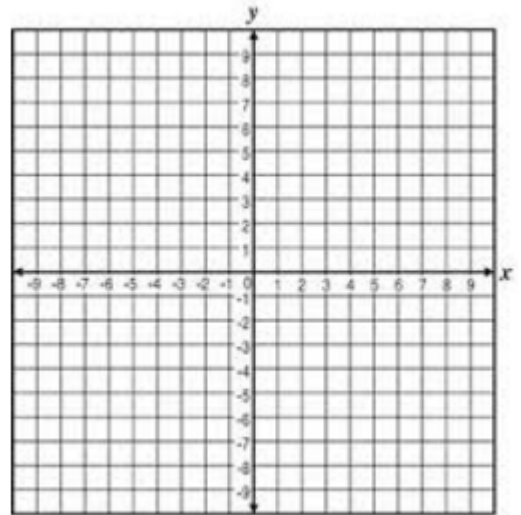
Coordinate of Vertex:

Direction it opens:

Axis of Symmetry:

Coordinates of Focus:

Equation of Directrix:



10.)  $4x^2 - 40x + 48y + 4 = 0$

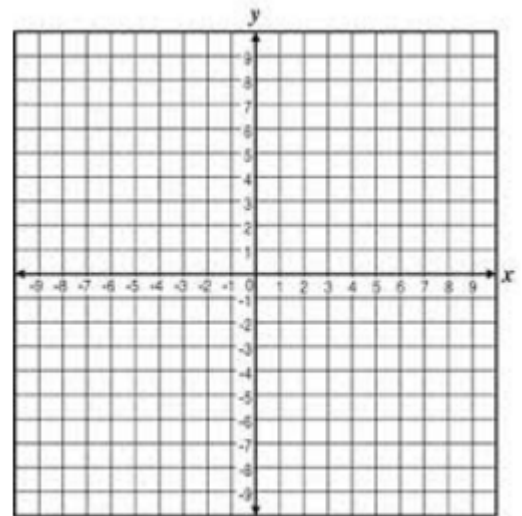
Coordinate of Vertex:

Direction it opens:

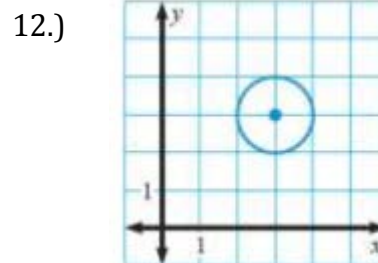
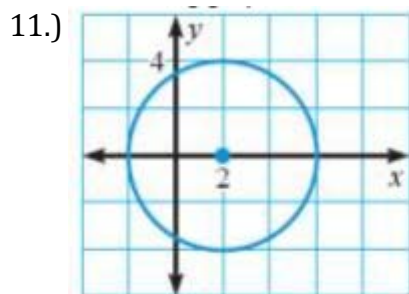
Axis of Symmetry:

Coordinates of Focus:

Equation of Directrix:



Write the equation of the circle.



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Write the equation of the circle.

13.) Center:  $(5, -7)$  and Point:  $(13, 8)$

14.) Endpoints of Diameter:  $(-4, 7)$  and  $(6, -9)$

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Write the equation of parabola.

15.) Focus  $(4, -5)$  and directrix:  $y = -9$

16.) Vertex:  $(4, -3)$  and Focus:  $(4, 1)$

17.) Vertex:  $(2, 0)$  passing through  $(-6, 8)$  opens horizontally

18.) Vertex:  $(-2, 1)$  passing through  $(2, -1)$  opens vertically