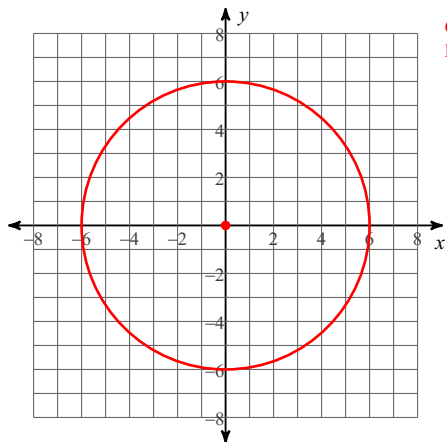


Assignment

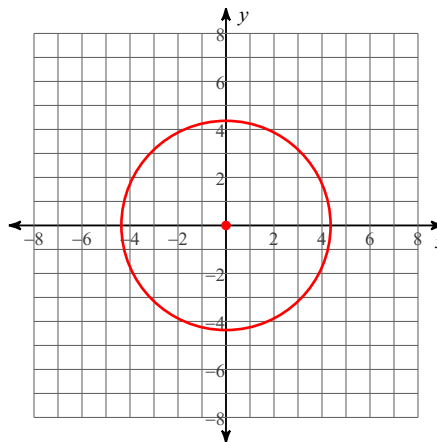
Identify the center, radius, and ALL intercepts from the equation of each circle. Then graph the circle. Leave your answers in simplest radical form.

1) $x^2 + y^2 = 36$



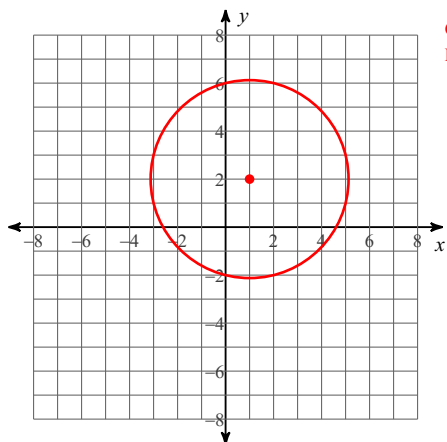
Center: (0, 0)
Radius: 6

2) $x^2 + y^2 = 19$



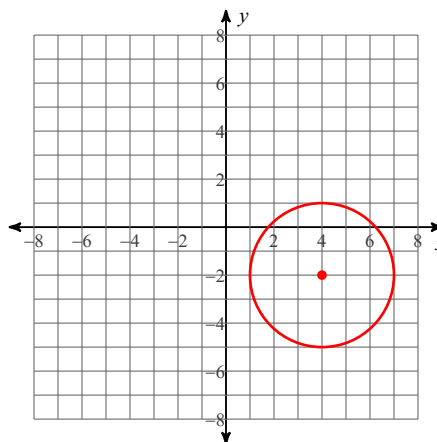
Center: (0, 0)
Radius: $\sqrt{19}$

3) $(x - 1)^2 + (y - 2)^2 = 17$



Center: (1, 2)
Radius: $\sqrt{17}$

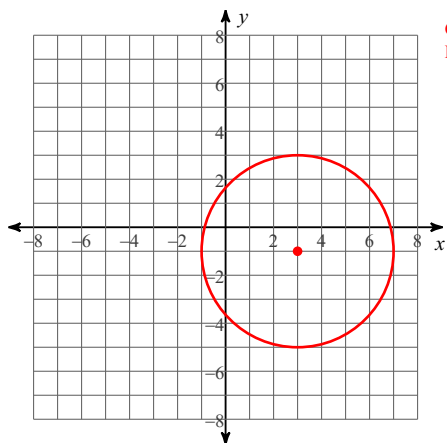
4) $(x - 4)^2 + (y + 2)^2 = 9$



Center: (4, -2)
Radius: 3

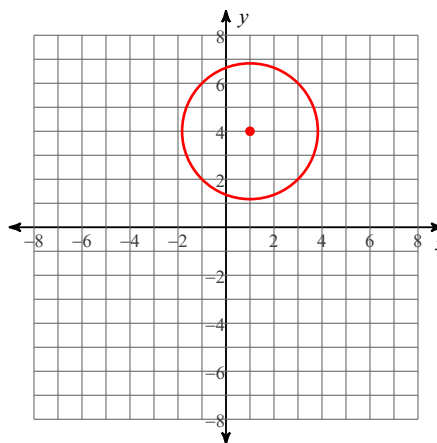
Identify the center and radius of each circle. Then graph the circle. Leave answers as radicals.

5) $2y + x^2 - 6 = -y^2 + 6x$



Center: (3, -1)
Radius: 4

6) $-2x + 9 = -y^2 - x^2 + 8y$



Center: (1, 4)
Radius: $2\sqrt{2}$

Use the information provided to write the standard form equation of each circle.

- 7) Center: $(0, 0)$
Radius: 6

$$x^2 + y^2 = 36$$

- 8) Center: $(0, 0)$
Radius: 9

$$x^2 + y^2 = 81$$

- 9) Center: $(16, 11)$
Radius: 2

$$(x - 16)^2 + (y - 11)^2 = 4$$

- 10) Center: $(-7, 0)$
Radius: 5

$$(x + 7)^2 + y^2 = 25$$

- 11) Center: $(-8, -2)$
Radius: 6

$$(x + 8)^2 + (y + 2)^2 = 36$$

- 12) Center: $(4, 5)$
Radius: $\sqrt{179}$

$$(x - 4)^2 + (y - 5)^2 = 179$$

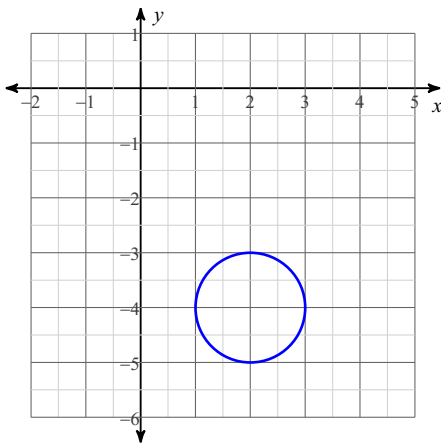
- 13) Center: $(11, -8)$
Point on Circle: $(17, -4)$

$$(x - 11)^2 + (y + 8)^2 = 52$$

- 14) Center: $(4, 14)$
Tangent to $x = 7$

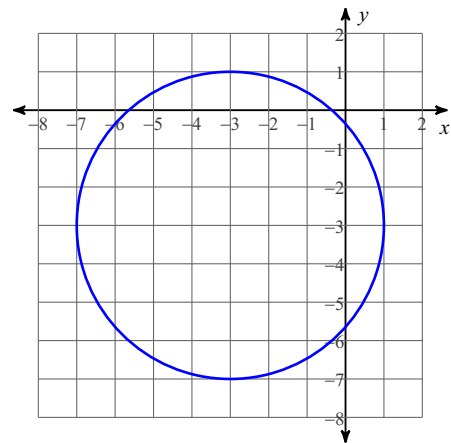
$$(x - 4)^2 + (y - 14)^2 = 9$$

15)



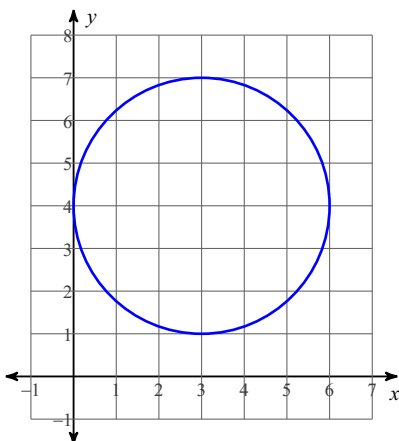
$$(x - 2)^2 + (y + 4)^2 = 1$$

16)



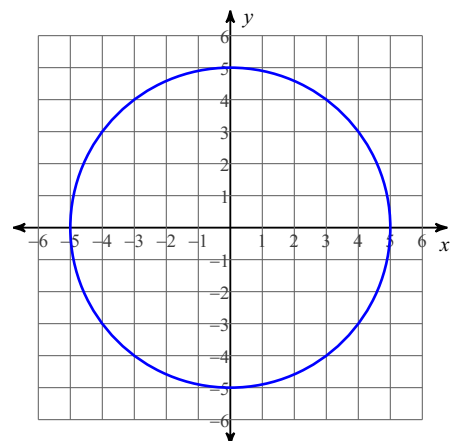
$$(x + 3)^2 + (y + 3)^2 = 16$$

17)



$$(x - 3)^2 + (y - 4)^2 = 9$$

18)



$$x^2 + y^2 = 25$$