

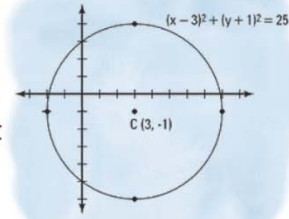
Name : _____

Class : _____



Graphing circle

A circle graph is the intersection graph of a set of chords of a circle.



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

1)

Center: $(-13, -14)$

Radius: 1

$$(x + 13)^2 + (y + 14)^2 = 1$$

2)

Center: $(15, -8)$

Area: 16π

$$(x - 15)^2 + (y + 8)^2 = 16$$

3)

Center: $(-2, 9)$

Point on Circle: $(-5, 18)$

$$(x + 2)^2 + (y - 9)^2 = 90$$

4)

Center: $(13, 7)$

Tangent to $y = 11$

$$(x - 13)^2 + (y - 7)^2 = 16$$

5)

Center lies in the second quadrant

Tangent to $x = -14$, $y = -4$, and $x = 8$

$$(x + 3)^2 + (y - 7)^2 = 121$$

6)

Ends of a diameter: $(11, -6)$ and $(1, 14)$

$$(x - 6)^2 + (y - 4)^2 = 125$$