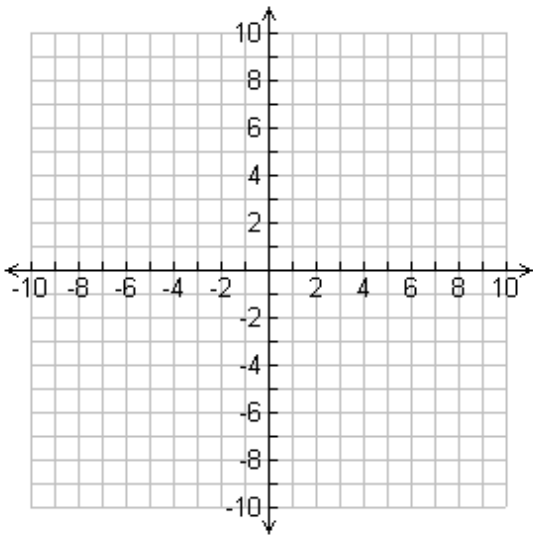


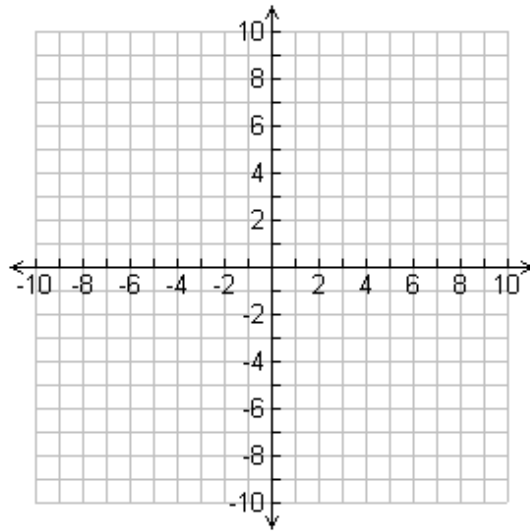
Topic 29: The Equation of a Circle
Quiz Version: PRACTICE

$$(x - h)^2 + (y - k)^2 = r^2$$

1) Graph $(x + 3)^2 + (y - 1)^2 = 25$



2) Graph $(x - 2)^2 + (y + 5)^2 = 9$



3) Write the equation of a circle that has the center at $(-4, 8)$ with a radius of 12.

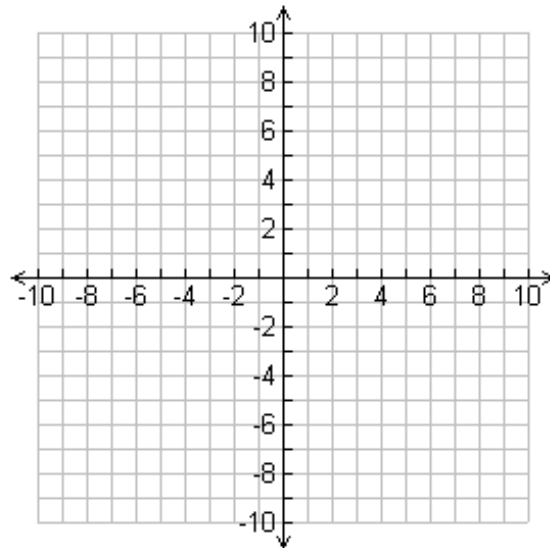
4) Write the equation of a circle that has the center at $(2, 5)$ with a radius of 6.

5) Given the equation $(x - 4)^2 + (y - 7)^2 = 20$

Which points are on the circle? Show your work as proof.

- a) $(0, 9)$ b) $(2, 11)$ c) $(11, 2)$ d) $(6, 11)$

6) A rabbit will move no more than 10 miles away from its hole. At that time, you are taking a walk about 9 miles west and 7 miles north of the rabbit hole. Is there any possibility of you meeting the rabbit?



Bonus: Name another point on the circle.