Circle –

Radius –

Center –

Equation of a Circle –

Reading the Lesson

1. Write an equation for each circle described. Explain how you write the equation.

a. a circle with center at (3, 9) and radius 1

b. a circle with center at (–5, –6) and radius 10

c. a circle with center at the origin and radius 8

2. Find the coordinates of the center and the measure of the radius for each circle whose equation is given. Explain how you find the center and radius.

a. $(x - 2)^2 + (y - 3)^2 = 16$

b. $(x + 1)^2 + (y + 5)^2 = 9$

c. $x^2 + y^2 = 49$

3. Use the graph to write an equation for the circle. Explain your method for writing the equation.