Progress Check: Equations of a Circle   Name: _____

1. A circle of radius r has a center at point (h, k) and includes the point (x,y). Find the distance from the point (h,k) to the point (x, y). Then explain how this equation relates to the equation of a circle. A picture may be helpful.

2. Write the equation for a circle with a center at (-3, 2) and a radius of 4.

3. Identify the center and radius for the following circle.
$(x - 5)^2 + (y + 4)^2 = 50$