

**10 - 8**

Equation of a Circle

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**Standard Form**

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

$(h, k)$  = Center of Circle

$r$  = length of radius

*Find the equation of a Circle in standard form given the following information:*

1) Center (3, -4);  $r = 4$

2) Center (-2, 5); Point on the Circle is (3, 4)

Graphing a Circle on the Coordinate Plane

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

