## **Graphing Circles**

Write each of the following in standard form and graph each circle. Be sure to label the center of the circle as well as the four points used to graph the circle. Make sure graphs are done on graph paper.

1. 
$$(x+5)^2 + (y-2)^2 = 4$$

**2.** 
$$(x-6)^2 + (x+3)^2 = 9$$

**1.** 
$$(x+5)^2 + (y-2)^2 = 4$$
 **2.**  $(x-6)^2 + (x+3)^2 = 9$  **3.**  $(x+2)^2 + (y+5)^2 = 16$ 

**4.** 
$$(x^2 + 6x + ) + (y^2 - 8y + ) = 0 + ______$$

**4.** 
$$(x^2 + 6x + ) + (y^2 - 8y + ) = 0 + _____$$
 **5.**  $(x^2 - 8x + ) + (y^2 + 4y + ) = -11 + _____$ 

**6.** 
$$(x^2 - 10x + ) + (y^2 - 4y + ) = -13 + _____$$
 **7.**  $x^2 + y^2 = 16$ 

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**8.** 
$$2x^2 + 2y^2 + 4x + 12y - 52 = 0$$

**8.** 
$$2x^2 + 2y^2 + 4x + 12y - 52 = 0$$
 **9.**  $4x^2 + 4y^2 - 20x - 12y - 2 = 0$  **10.**  $x^2 + y^2 + 4x + 2y - 44 = 0$ 

**10.** 
$$x^2 + y^2 + 4x + 2y - 44 = 0$$

**11.** 
$$x^2 + y^2 - 6x + 8y + 20 = 0$$
 **12.**  $x^2 + y^2 + 6x + 8y + 13 = 0$ 

**12.** 
$$x^2 + y^2 + 6x + 8y + 13 = 0$$