

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

### Properties of Circles

Identify the center and radius of each equation.

1)  $x^2 + y^2 - 2\sqrt{5}x = -1 - 3y$

6)  $y^2 + 6y + 14x = -x^2 + 86$

2)  $y^2 - 4y - 12x = -x^2 - 36$

7)  $y^2 - 2\sqrt{6}x + 2\sqrt{5}y + 5 = -x^2$

3)  $(x - \frac{5}{2})^2 + (y - \frac{1}{2})^2 = \frac{169}{4}$

8)  $x^2 + y^2 + 5x = \frac{-1}{4} - 5y$

4)  $(x - 2)^2 + (y - 9)^2 = 9$

9)  $(x + \sqrt{10})^2 + (y - \sqrt{6})^2 = 7$

5)  $x^2 + y^2 - 22x - 14y + 166 = 0$

10)  $(x - \frac{11}{2})^2 + (y - \frac{1}{2})^2 = \frac{81}{4}$