

**PreCalculus**  
**WS: Pre 9.1 (Circles)**

Name \_\_\_\_\_  
Date \_\_\_\_\_ Block \_\_\_\_\_

*Complete the square to write each equation in standard form. Identify the center and radius for each circle.*

1.)  $8x + x^2 - 2y = 64 - y^2$

2.)  $137 + 6y = -y^2 - x^2 - 24x$

3.)  $y^2 + 2x + x^2 = 24y - 120$

4.)  $8x + 32y + y^2 = -263 - x^2$

5.)  $x^2 + y^2 + 14x - 8y + 29 = 0$

6.)  $4y + y^2 = -28x - x^2 - 191$

**Write the standard form of the equation of each circle shown or described.**

7.) Center: (2, -5) Point on Circle: (-7, -1)

8.) Diameter with Endpoints: (-3, 11) and (3, -13)

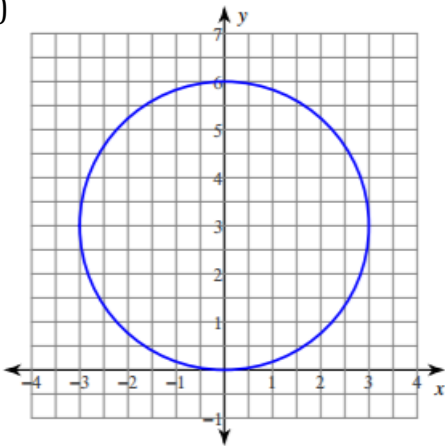
9.) Center (3, 5) passes through (-1, -2)

10.) Center (3, 6) passes through (-1, 4)

11.) Endpoints of Diameter: (3, 6) and (-1, 4)

12.) Endpoints of diameter:  $\left(\frac{1}{2}, 4\right)$  and  $\left(\frac{3}{2}, -1\right)$

13.)



14.)

