

NAME

QUARTER

GRADE &amp; SECTION

DATE

## Activity: Equation of a Circle

I. Write the equation of the circle in standard form given the following details.

1. The center of the circle is  $(6, -2)$  with radius of 6.

Equation:  $(x \quad \square \quad \square)^\square + (y \quad \square \quad \square)^\square = \square$

2. The point  $(-16, 13)$  is on the circle with center  $(-16, 14)$ .

Radius:  $\square$

Equation:  $(x \quad \square \quad \square)^\square + (y \quad \square \quad \square)^\square = \square$

3. The diameter of the circle has endpoints  $(-16, -1)$  and  $(0, 11)$ .

Center:  $(\square, \square)$

Radius:  $\square$

Equation:  $(x \quad \square \quad \square)^\square + (y \quad \square \quad \square)^\square = \square$

II. Determine the center and radius of the circle.

1. The circle has an equation of  $(x - 2)^2 + (y + 1)^2 = 16$ .

Center:  $(\square, \square)$

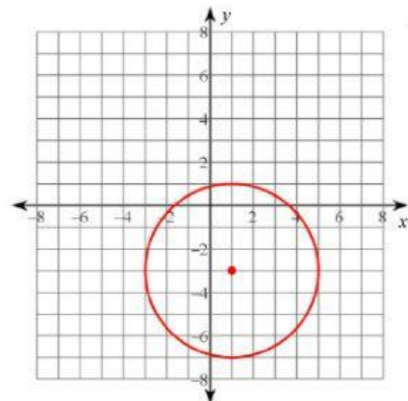
Radius:  $\square$

2. The circle has an equation of  $x^2 + (y - 2)^2 = 25$ .

Center:  $(\square, \square)$

Radius:  $\square$

3.



Center:  $(\square, \square)$

Radius:  $\square$

How many attempts? \_\_\_\_.  
How well did you do?



Need help!



Just OK!



Splendid

I FEEL THAT...