Name: $\qquad$ Period: $\qquad$

## HW 5-6 HONORS: Distance with Circles

1. Calculate the circumference and area of the circle.

Circumference:

Area:

2. Calculate the perimeter and area of the figure.

Perimeter:

Area:

3. Given this circle with the center at the origin and a point on the circle at $\mathbf{( 8 , 0})$. Determine if the points are on the circle. Justify your answer by showing your work.
a. Give the length of the radius.
b. $(7,4)$
c. $(-6,-5)$

d. Calculate the circumference of the circle.
e. Calculate the area of the circle.
4. Given this circle with the center at $(\mathbf{3}, \mathbf{- 2})$ and a point on the circle at $\mathbf{( 6 , 3})$. Determine if the points are on the circle. Justify your answer by showing your work.
a. Give the length of the radius.
b. $(-2,-5)$
c. $(-1,2)$

d. Calculate the circumference of the circle.
e. Calculate the area of the circle.
5. Given a circle with the center at $\mathbf{( 0 , 1 )}$ and a point on the circle at $\mathbf{( 3 , 5 )}$, determine if the points are on the circle. Justify your answer by showing your work.
a. $(-3,-3)$
b. $(\sqrt{3}, \sqrt{22})$

8. Given a circle with radius 3 and centered at (2,4). Determine if the following points are on the circle. Justify your answer by showing your work.
a. $(1,1)$
b. $(5,4)$


