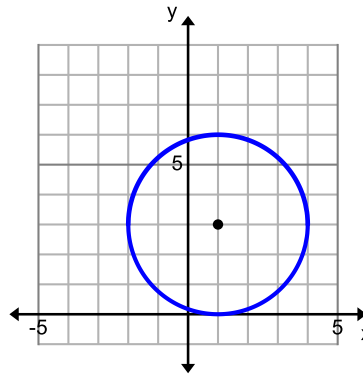# HW 6-8: Distance with Circles

1. Calculate the circumference and area of the circle.
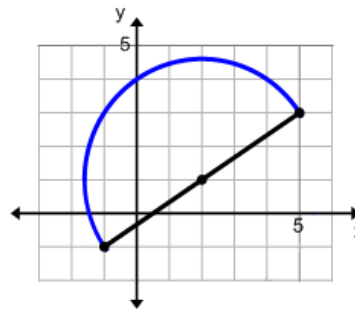
    Circumference:

    Area:

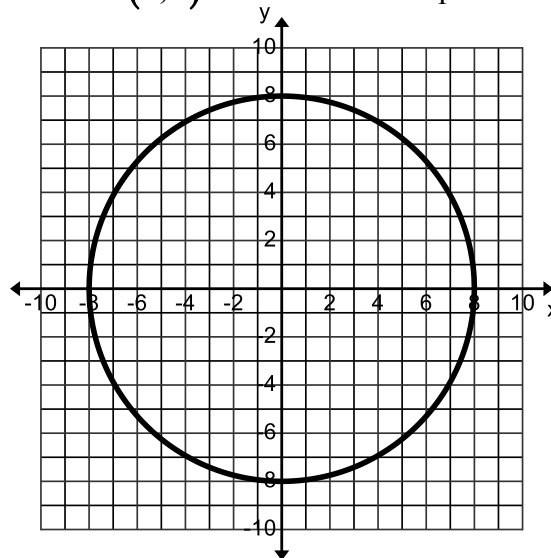**2.** Calculate the perimeter and area of the figure.

    Perimeter:

    Area:

3. Given this circle with the center at the origin and a point on the circle at $(8,0)$. Determine if the points are on the circle. Justify your answer by showing your work.

    a. Give the length of the radius.

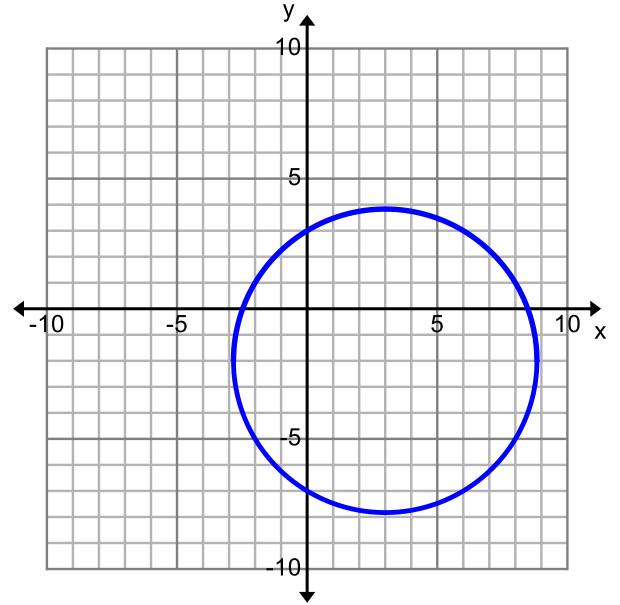   b. $(7, 4)$

    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 $(3,-2)$ and a point on the circle at $(6,3)$. Determine if the points are on the circle. Justify your answer by showing your work.
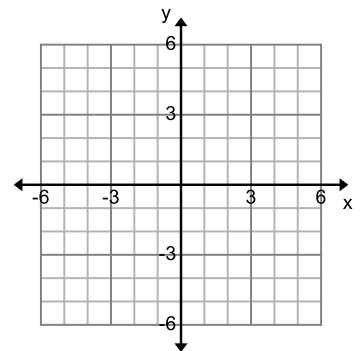
a. Give the length of the radius.

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 $(0,1)$ and a point on the circle at $(3,5)$, determine if the points are on the circle. Justify your answer by showing your work.

a. (-3, -3)

b. $\left(\sqrt{3}, \sqrt{22}\right)$

6. 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)