## Quiz # 2

**Directions:** Carefully read each question below and answer to the best of your ability in the space provided. You **MUST** show your work to receive full credit!

1. (5 points) Find the center and radius of the circle whose equation is

$$x^2 - 6x + y^2 + 8y + 20 = 0.$$

2. (5 points) Suppose Q(3,0) is the midpoint of the line segment AB where A is the point (1, -4). Find the point B. (Hint: Let B be the point  $(x_2, y_2)$ ; then use the definition of a midpoint to find  $x_2$  and  $y_2$ ).

3. (5 points) Find the x-intercepts and y-intercepts of the following equation:

$$x^2 - 4xy + 9y^2 = 1.$$

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

Question:	1	2	3	Total
Points:	5	5	5	15
Score:				