

**Algebra II Class Worksheet #1 Unit 7 page 1** \_\_\_\_\_

Find PQ for each of the following. When appropriate, round your answer to the nearest tenth.

1.  $P(3, 2)$ ;  $Q(-1, 5)$ ;  $PQ =$  \_\_\_\_\_

2.  $P(-3, 4)$ ;  $Q(3, 4)$ ;  $PQ =$  \_\_\_\_\_

3.  $P(4, 1)$ ;  $Q(-3, 3)$ ;  $PQ =$  \_\_\_\_\_

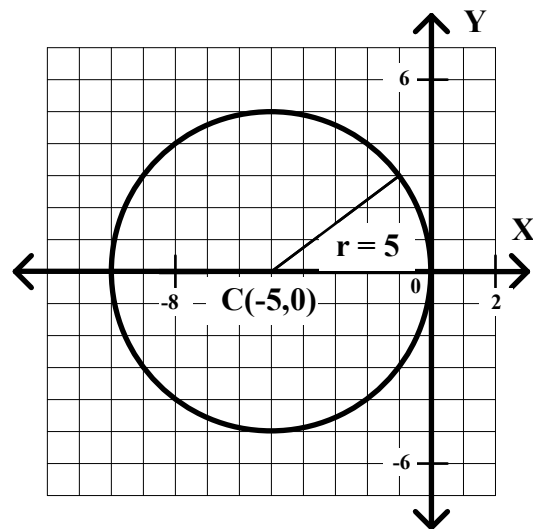
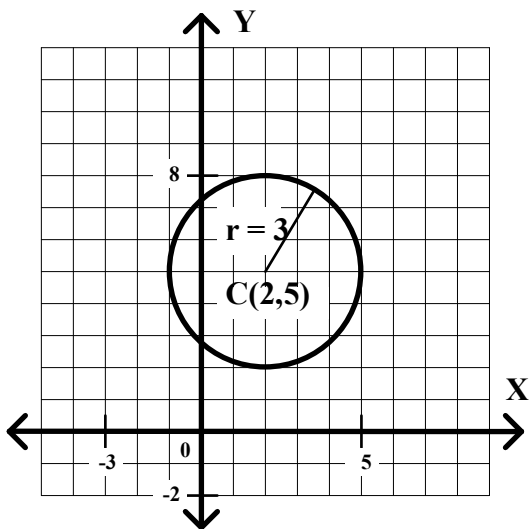
For each of the following circles, write its equation in (a) standard form and (b) general form.

4. (a) \_\_\_\_\_

5. (a) \_\_\_\_\_

(b) \_\_\_\_\_

(b) \_\_\_\_\_



## Algebra II Class Worksheet #1 Unit 7 page 2

### The Equations of a Circle

**General Form:**  $x^2 + y^2 + Dx + Ey + F = 0$

**Standard Form:**  $(x - h)^2 + (y - k)^2 = r^2$  where  $r$  is the radius measure and  $(h,k)$  is the center.

6. **Given:** A circle has general form equation  $x^2 + y^2 - 6x + 4y - 3 = 0$ .

Find the standard form equation and graph the circle.

