

## Section 2.2: Circles

### Video 1

Find the equation of a circle with the given center and radius.

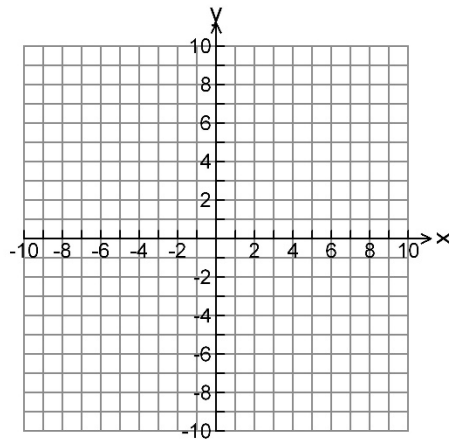
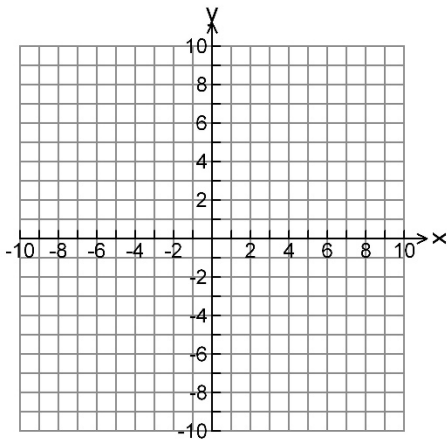
1) Center:  $(0,0)$ , Radius: 5

2) Center:  $(3,2)$ , Radius: 3

Graph the circle with the given equation.

3)  $x^2 + y^2 = 16$

4)  $(x+2)^2 + (y-1)^2 = 36$



**Video 2**

5) Find the center and radius of a circle with the given equation:  $x^2 - 8x + y^2 + 10y + 32 = 0$

6) Find the center and radius of a circle with the given equation:  $4x^2 - 16x + 4y^2 + 12y - 75 = 0$

**Video 3**

7) A point  $(x, y)$  is located 4 units from  $(3, 7)$ , 5 units from  $(-4, 3)$ , and 10 units from  $(7, 1)$ .

Find the coordinates of the point  $(x, y)$ ,