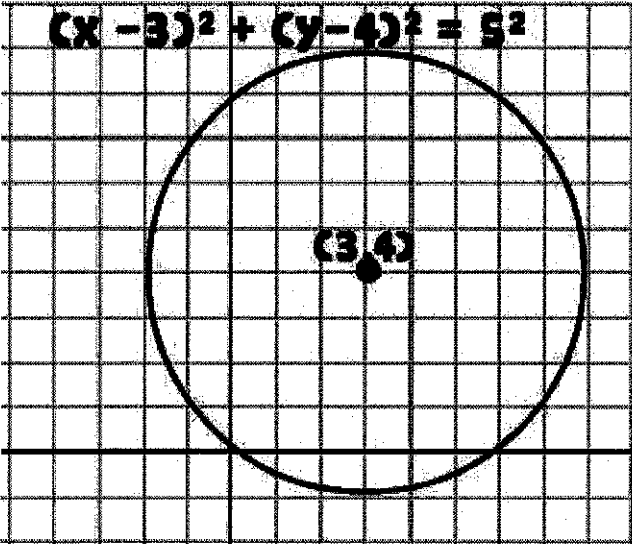


X

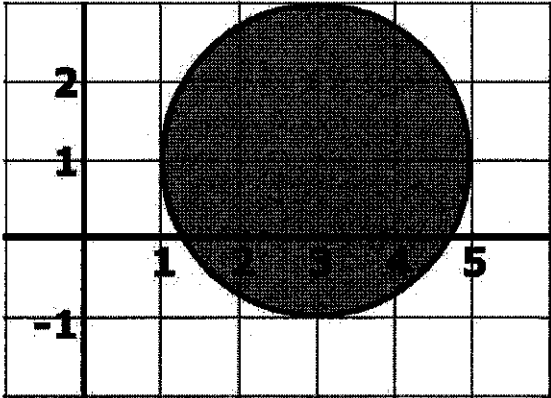
# Standard Form Equation of A Circle

Example of the Standard Form Equation of a Circle



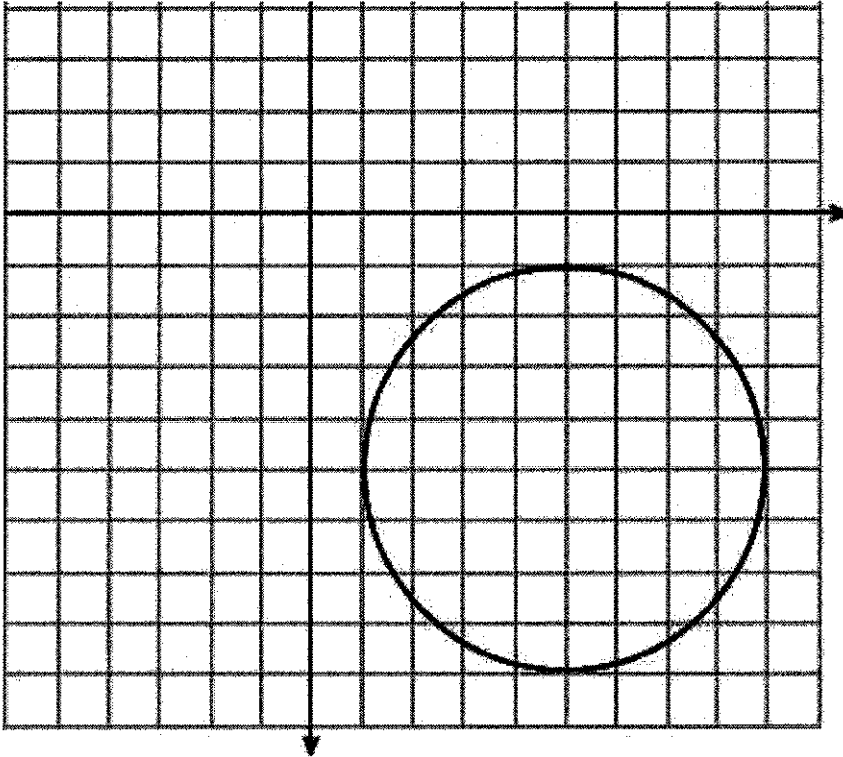
## Model Problem 1

2) What is the equation of the circle on the right?



### Model Problem 2

What is the equation of the circle below?



### Model Problem 3 and 4

Identify the coordinates of the center and the length of the radius in the circles below

$(X - 5)^2 + (y + 2)^2 = 4$       **radius:**                      **Center:** (\_\_, \_\_)

$(X + 2)^2 + (y - 1)^2 = 9$       **radius:**                      **Center:** (\_\_, \_\_)

### Part I

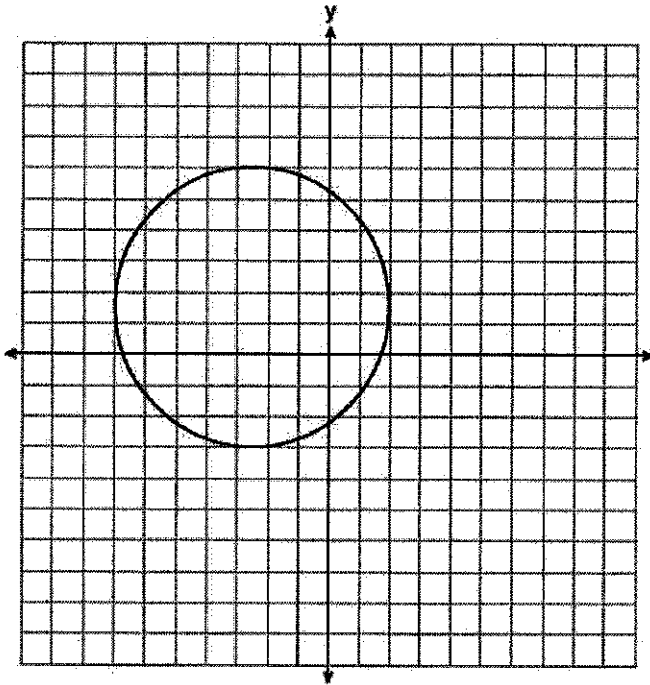
Identify the coordinates of the center and the length of the radius in the circles below.

1)  $(X - 1)^2 + (y - 3)^2 = 9$       **radius:**                      **Center:** (\_\_, \_\_)

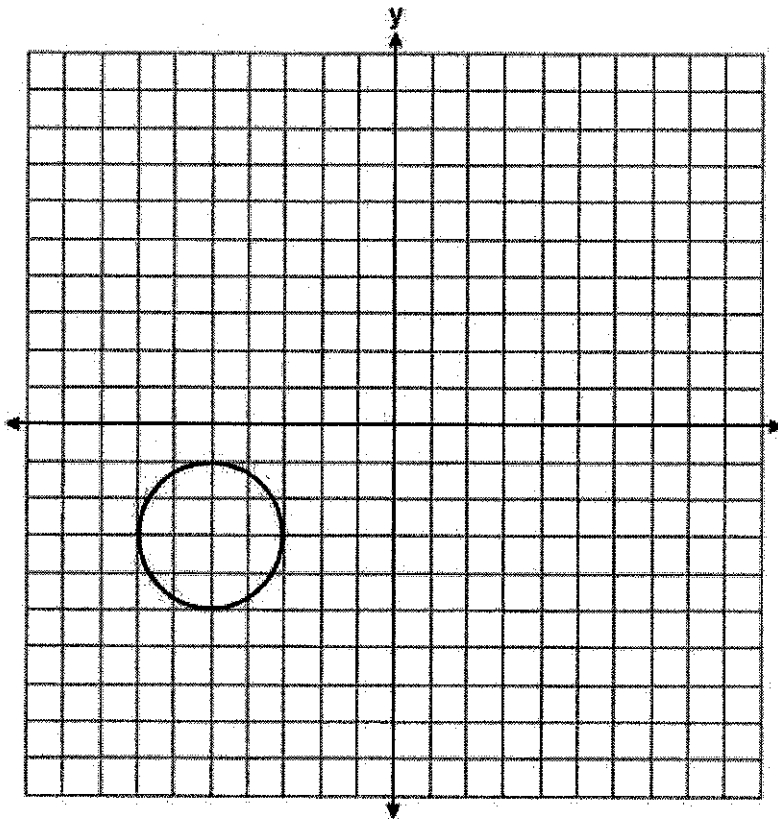
2)  $(X + 14)^2 + (y - 5)^2 = 16$       **radius:**                      **Center:** (\_\_, \_\_)

3)  $(X - 5)^2 + (y - 1)^2 = 25$       **radius:**                      **Center:** (\_\_, \_\_)

4) What is the equation of the circle pictured below



5) What is the equation of the circle pictured below



**Part II.**

Use the attached graph paper to draw the graph of the following equations

1)  $(X + 4)^2 + (y - 8)^2 = 6^2$

2)  $(X - 2)^2 + (y + 2)^2 = 7^2$

3)  $(x - 1)^2 + (y + 2)^2 = 64$

Write the equation of circle and draw its graph given the radius and center below

4) radius = 9 Center(-1,1)

**Equation:** \_\_\_\_\_

*Draw graph on attached sheet*

5) radius = 3 Center(-5,4)

**Equation:** \_\_\_\_\_

*Draw graph on attached sheet*

6) radius = 4 Center(3,1)

**Equation:** \_\_\_\_\_

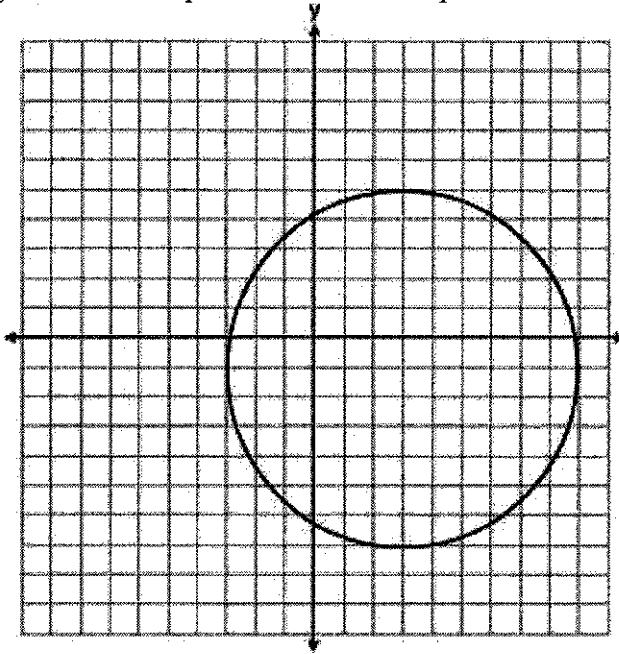
**Homework:**

1)  $(x + 2)^2 + (y - 12)^2 = 36$       **radius:**      **Center:** (\_\_, \_\_)

2)  $(y+7)^2 + (X+5)^2 = 49$       **radius:**      **Center:** (\_\_, \_\_)

3)  $(X + 8)^2 + (y+17)^2 = 49$       **radius:**      **Center:** (\_\_, \_\_)

4) What is the equation of the circle pictured below?



5) What is the equation of the circle pictured below?

