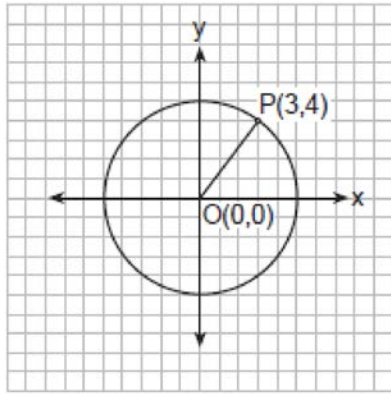
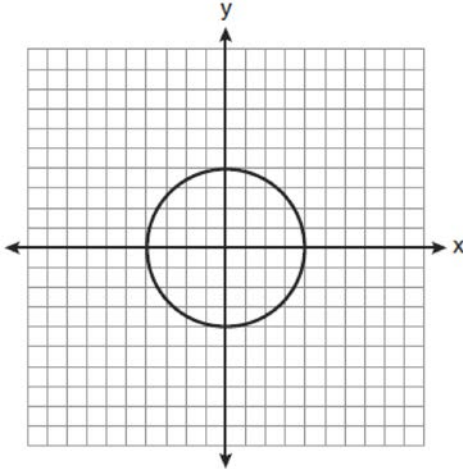


**G.G.72: Equations of Circles 2: Write the equation of a circle, given its graph**

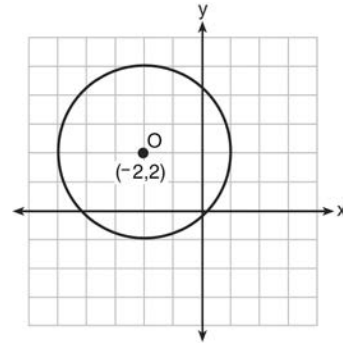
- 1 In the accompanying diagram, the center of circle  $O$  is  $(0,0)$ , and the coordinates of point  $P$  are  $(3,4)$ . If  $\overline{OP}$  is a radius, what is the equation of the circle?



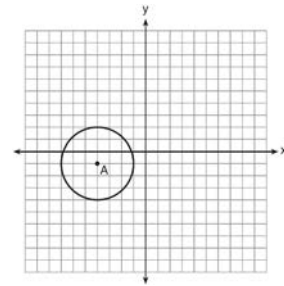
- 2 What is an equation for the circle shown in the graph below?



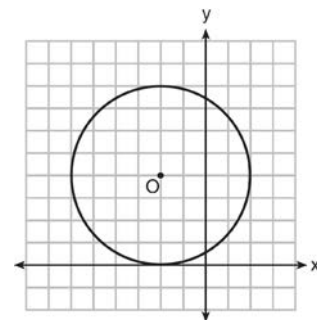
- 3 What is an equation of circle  $O$  shown in the graph below?



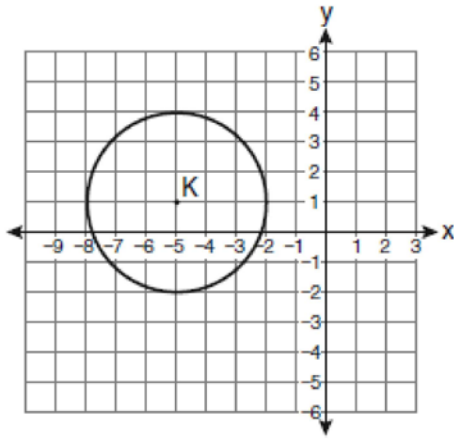
- 4 Which equation represents circle  $A$  shown in the diagram below?



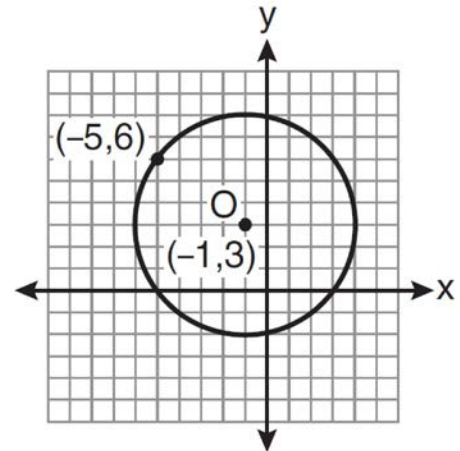
- 5 What is an equation of circle  $O$  shown in the graph below?



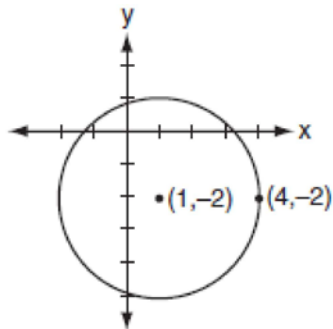
- 6 Which equation represents circle  $K$  shown in the graph below?



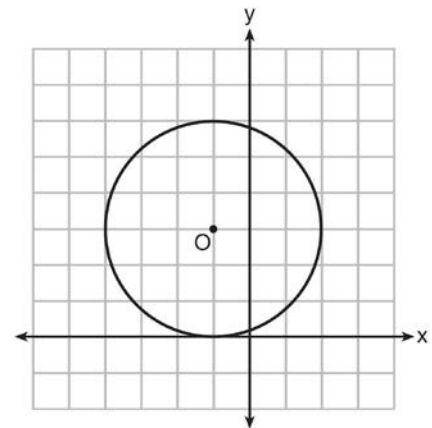
- 8 What is an equation of circle  $O$  shown in the graph below?



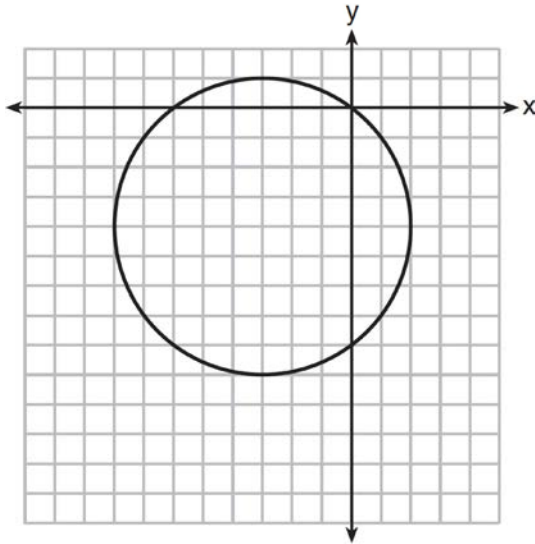
- 7 Which equation represents the circle shown in the accompanying graph?



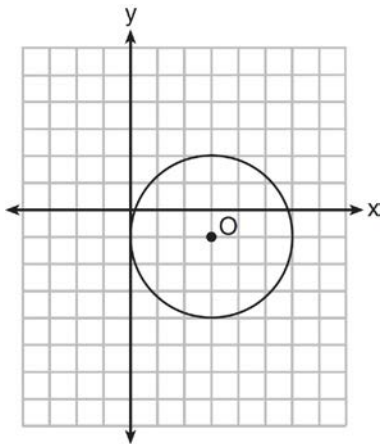
- 9 Circle  $O$  is graphed on the set of axes below. Which equation represents circle  $O$ ?



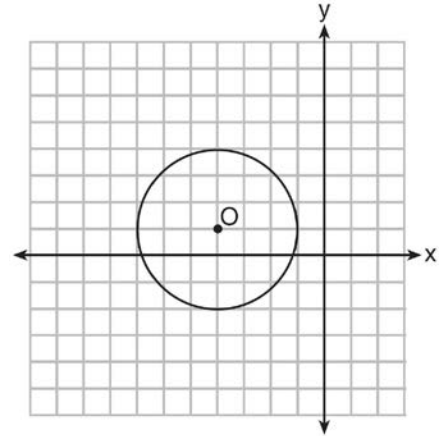
- 10 What is an equation of the circle shown in the graph below?



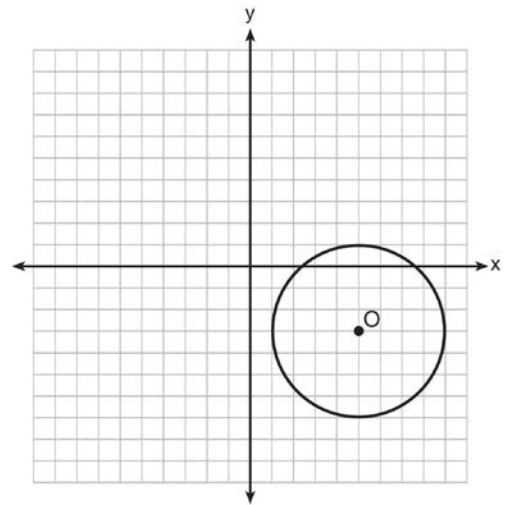
- 11 What is the equation for circle  $O$  shown in the graph below?



- 12 What is the equation of circle  $O$  shown in the diagram below?

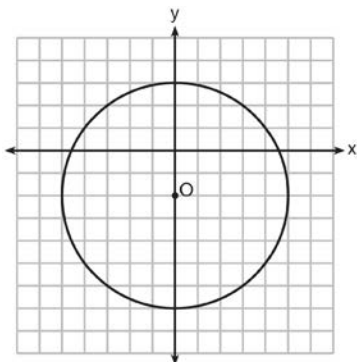


- 13 The diagram below is a graph of circle  $O$ .

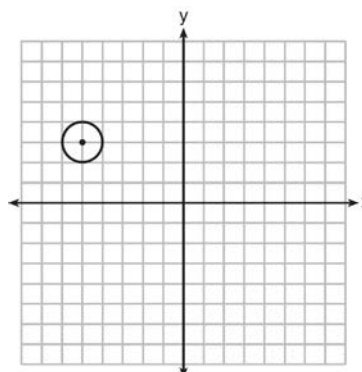


Which equation represents circle  $O$ ?

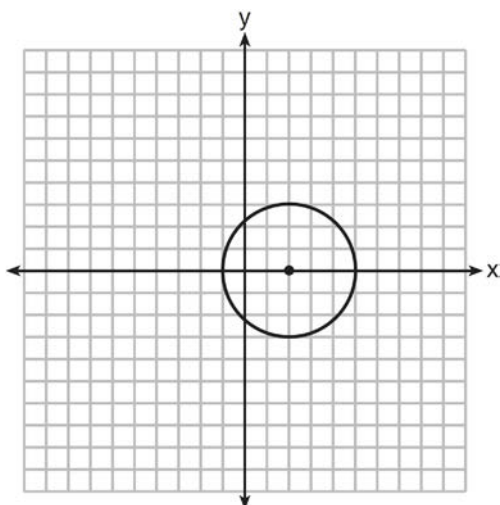
- 14 Which equation represents circle  $O$  shown in the graph below?



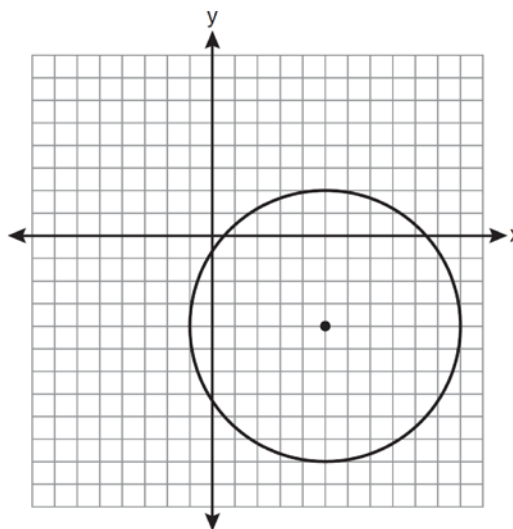
- 16 Which equation represents the circle shown in the graph below?



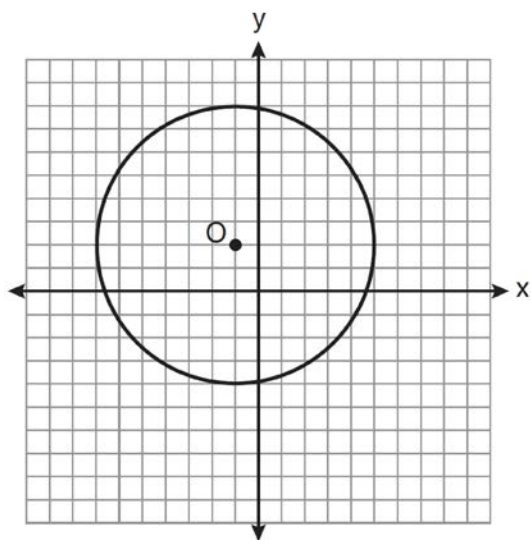
- 15 Which equation represents the circle shown in the graph below?



- 17 Write an equation of the circle graphed in the diagram below.



- 18 Write an equation for circle  $O$  shown on the graph below.



**G.G.72: Equations of Circles 2: Write the equation of a circle, given its graph**  
**Answer Section**

1 ANS:

$$x^2 + y^2 = 25$$

REF: 080823a

2 ANS:

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

The radius is 4.  $r^2 = 16$ .

REF: 061014ge

3 ANS:

$$(x + 2)^2 + (y - 2)^2 = 9$$

REF: 011220ge

4 ANS:

$$(x + 4)^2 + (y + 1)^2 = 9$$

REF: 011323ge

5 ANS:

$$(x + 2)^2 + (y - 4)^2 = 16$$

REF: 081409ge

6 ANS:

$$(x + 5)^2 + (y - 1)^2 = 9$$

REF: 080921ge

7 ANS:

$$(x - 1)^2 + (y + 2)^2 = 9$$

REF: 010716b

8 ANS:

$$(x + 1)^2 + (y - 3)^2 = 25$$

REF: 061110ge

9 ANS:

$$(x + 1)^2 + (y - 3)^2 = 9$$

REF: 061408ge

10 ANS:

$$(x + 3)^2 + (y + 4)^2 = 25$$

REF: 081212ge

11 ANS:

$$(x-3)^2 + (y+1)^2 = 9$$

REF: 061309ge

12 ANS:

$$(x+4)^2 + (y-1)^2 = 9$$

REF: 081312ge

13 ANS:

$$(x-5)^2 + (y+3)^2 = 16$$

REF: 011514ge

14 ANS:

$$x^2 + (y+2)^2 = 25$$

REF: 011415ge

15 ANS:

$$(x-2)^2 + y^2 = 9$$

REF: 061510ge

16 ANS:

$$(x+5)^2 + (y-3)^2 = 1$$

REF: 081520ge

17 ANS:

$$(x-5)^2 + (y+4)^2 = 36$$

REF: 081132ge

18 ANS:

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

REF: 081034ge