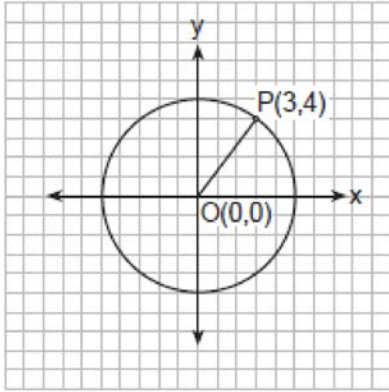
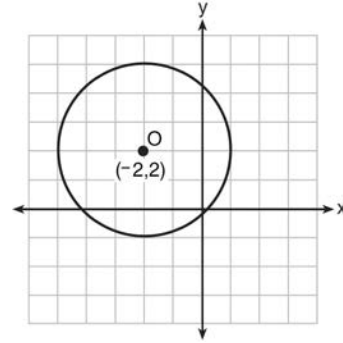


G.GPE.A.1: Equations of Circles 4b

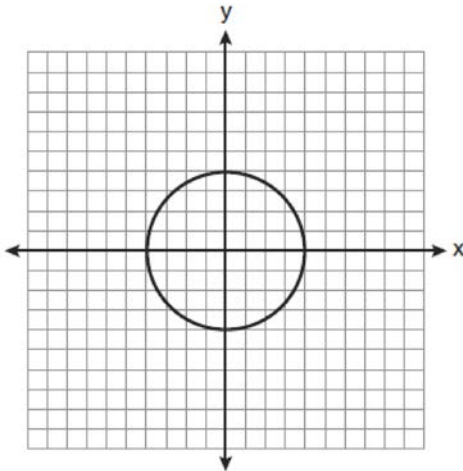
- 1 In the accompanying diagram, the center of circle O is $(0,0)$, and the coordinates of point P are $(3,4)$. If \overline{OP} is a radius, what is the equation of the circle?



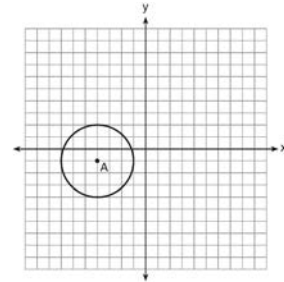
- 3 What is an equation of circle O shown in the graph below?



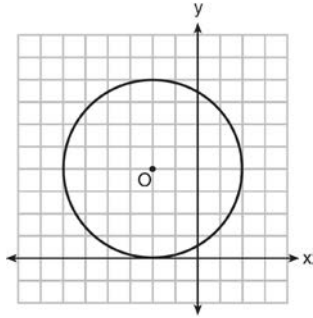
- 2 What is an equation for the circle shown in the graph below?



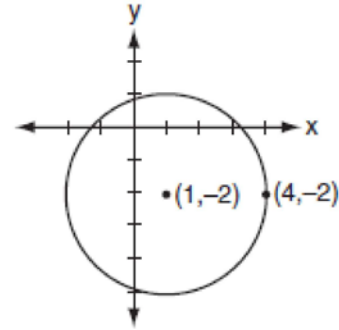
- 4 Which equation represents circle A shown in the diagram below?



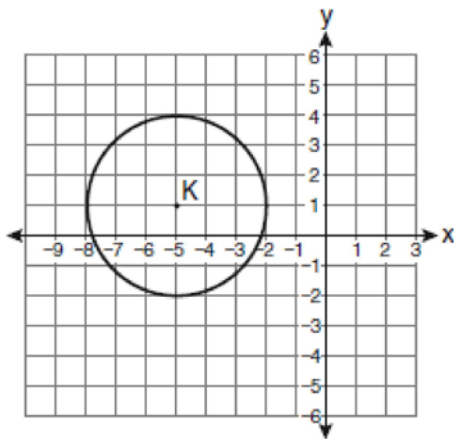
- 5 What is an equation of circle O shown in the graph below?



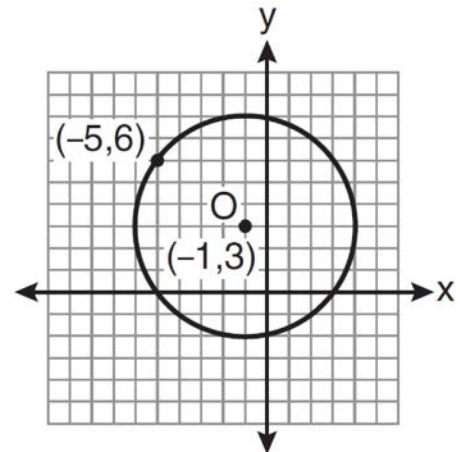
- 7 Which equation represents the circle shown in the accompanying graph?



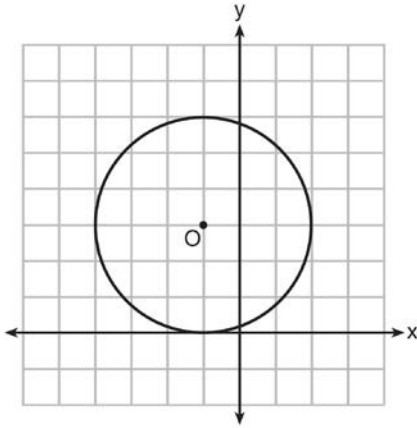
- 6 Which equation represents circle K shown in the graph below?



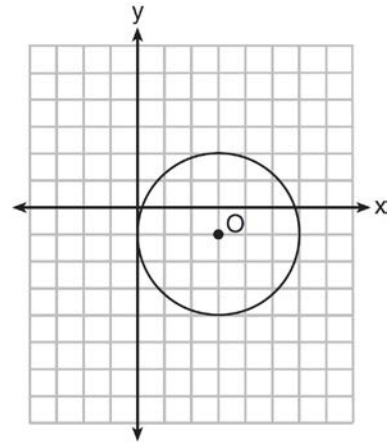
- 8 What is an equation of circle O shown in the graph below?



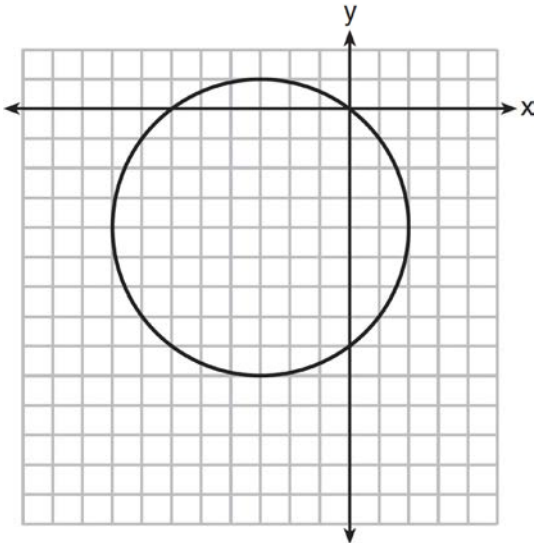
- 9 Circle O is graphed on the set of axes below. Which equation represents circle O ?



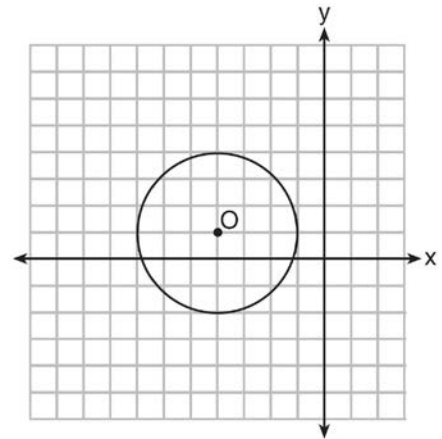
- 11 What is the equation for circle O shown in the graph below?



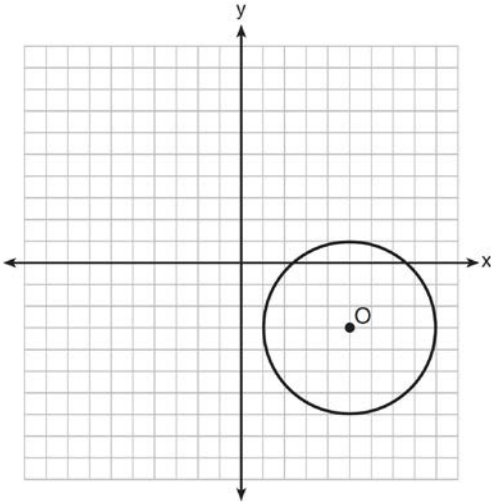
- 10 What is an equation of the circle shown in the graph below?



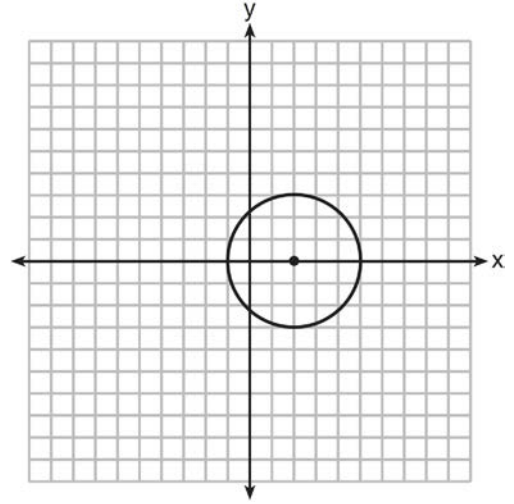
- 12 What is the equation of circle O shown in the diagram below?



13 The diagram below is a graph of circle O .

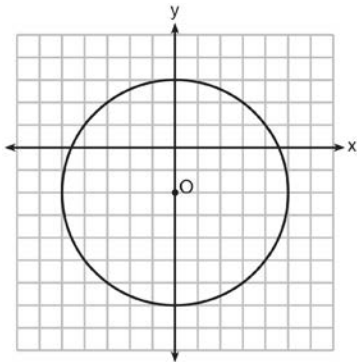


15 Which equation represents the circle shown in the graph below?

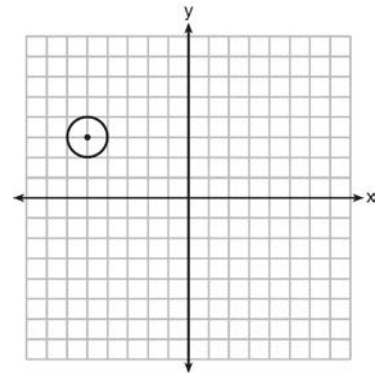


Which equation represents circle O ?

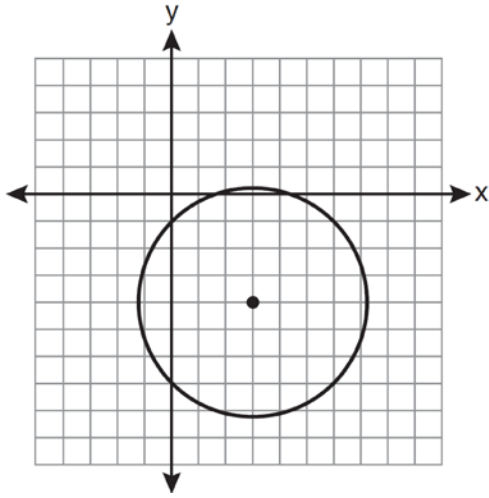
14 Which equation represents circle O shown in the graph below?



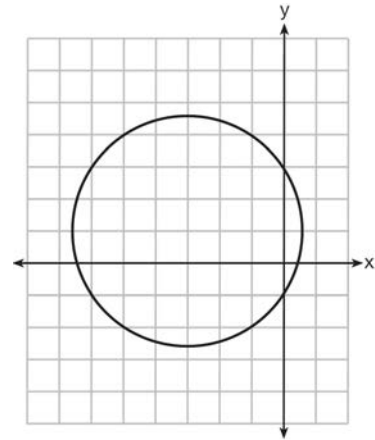
16 Which equation represents the circle shown in the graph below?



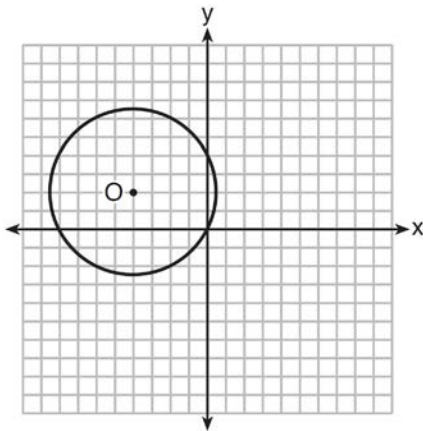
- 17 Which equation represents the circle shown in the graph below that passes through the point $(0, -1)$?



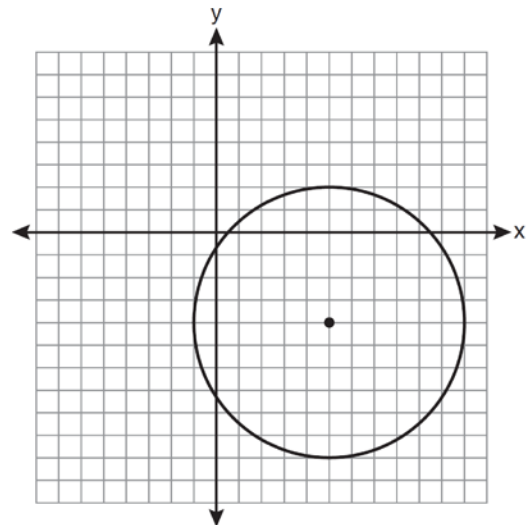
- 19 Which equation is represented by the graph below?



- 18 A circle with center O and passing through the origin is graphed below.

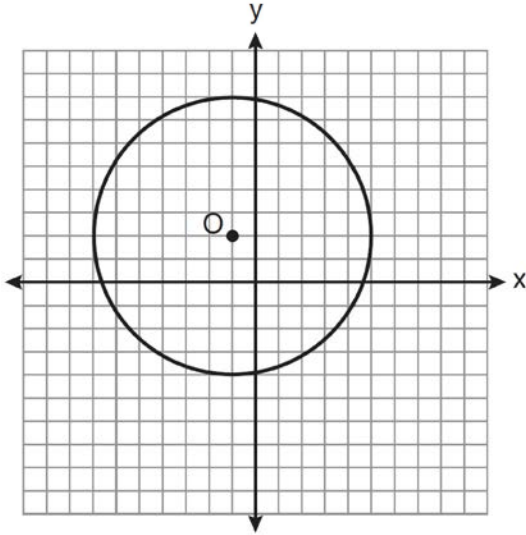


- 20 Write an equation of the circle graphed in the diagram below.

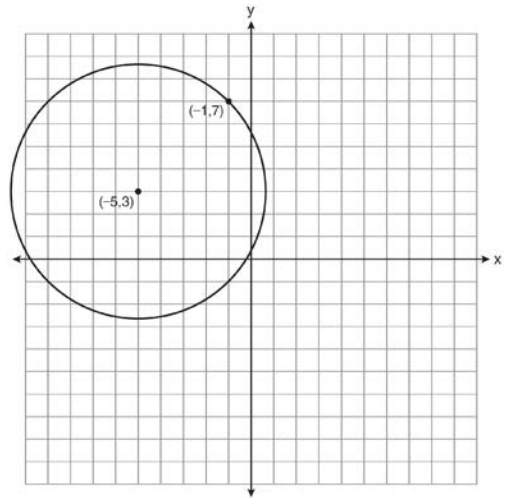


What is the equation of circle O ?

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

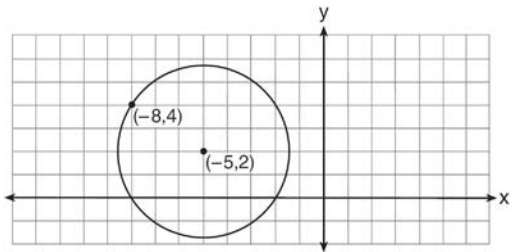


- 23 A circle shown in the diagram below has a center of $(-5,3)$ and passes through point $(-1,7)$.

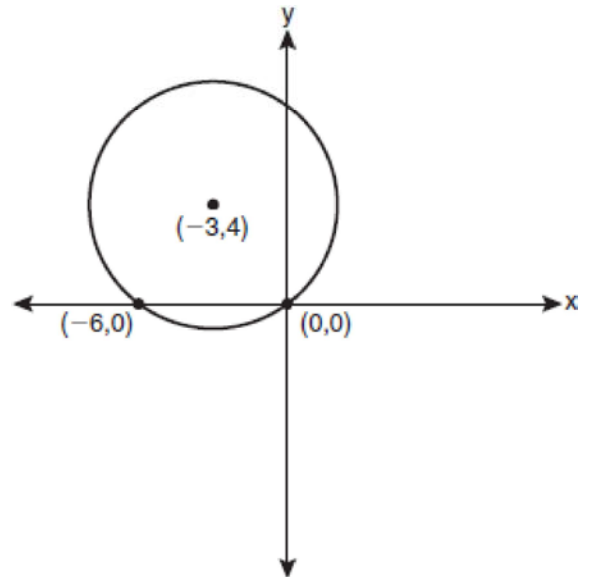


Write an equation that represents the circle.

- 22 Write an equation of the circle shown in the diagram below.



- 24 Write an equation of the circle shown in the graph below.



**G.GPE.A.1: Equations of Circles 4b
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:

$$(x-3)^2 + (y+4)^2 = 18$$

REF: 011126a2

18 ANS:

$$(x+4)^2 + (y-2)^2 = 20$$

REF: 011513a2

19 ANS:

$$(x+3)^2 + (y-1)^2 = 13$$

REF: 061318a2

20 ANS:

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

REF: 081132ge

21 ANS:

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

REF: 081034ge

22 ANS:

$$r = \sqrt{2^2 + 3^2} = \sqrt{13}. \quad (x + 5)^2 + (y - 2)^2 = 13$$

REF: 011234a2

23 ANS:

$$(x + 5)^2 + (y - 3)^2 = 32$$

REF: 081033a2

24 ANS:

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

REF: fall0929a2