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

1 What are the coordinates of the center of the circle represented by the equation $(x+3)^2+(y-4)^2=25$?

2 What are the center and the radius of the circle whose equation is $(x-3)^2+(y+3)^2=36$

3 A circle has the equation $(x+1)^2+(y-3)^2=16$. What are the coordinates of its center and the length of its radius?

4 In a circle whose equation is $(x-1)^2+(y+3)^2=9$, the coordinates of the center and length of its radius are

5 What are the coordinates of the center and the length of the radius of the circle whose equation is $(x+1)^2+(y-5)^2=16$?

6 A circle has the equation $(x-2)^2+(y+3)^2=36$. What are the coordinates of its center and the length of its radius?

7 What are the center and the radius of the circle whose equation is $(x-5)^2+(y+3)^2=16$?

8 The equation of a circle is $x^2+(y-7)^2=16$. What are the center and radius of the circle?

9 The center and radius of the given circle $(x-3)^2+(y+8)^2=39$ are:

10 A circle is represented by the equation $x^2+(y+3)^2=13$. What are the coordinates of the center of the circle and the length of the radius?

11 The equation of a circle is $(x-3)^2+y^2=8$. The coordinates of its center and the length of its radius are

12 The equation of a circle is $(x-2)^2+(y+5)^2=32$. What are the coordinates of the center of this circle and the length of its radius?

13 Circle O is represented by the equation $(x+3)^2+(y-5)^2=48$. The coordinates of the center and the length of the radius of circle O are

14 What are the center and radius of a circle whose equation is $(x-A)^2+(y-B)^2=C$?

15 The center of a circle represented by the equation $(x-2)^2+(y+3)^2=100$ is located in Quadrant

16 A circle with the equation $(x+6)^2+(y-7)^2=64$ does *not* include points in Quadrant

17 Which equation of a circle will have a graph that lies entirely in the first quadrant?
1) $(x-4)^2+(y-5)^2=9$
2) $(x+4)^2+(y+5)^2=9$
3) $(x+4)^2+(y+5)^2=25$
4) $(x-5)^2+(y-4)^2=25$

18 Which set of equations represents two circles that have the same center?
1) $x^2+(y+4)^2=16$ and $(x+4)^2+y^2=16$
2) $(x+3)^2+(y-3)^2=16$ and $(x-3)^2+(y+3)^2=25$
3) $(x-7)^2+(y-2)^2=16$ and $(x+7)^2+(y+2)^2=25$
4) $(x-2)^2+(y-5)^2=16$ and $(x-2)^2+(y-5)^2=25$

19 Students made four statements about a circle.
A: The coordinates of its center are $(4,-3)$.
B: The coordinates of its center are $(-4,3)$.
C: The length of its radius is $5\sqrt{2}$.
D: The length of its radius is 25.
If the equation of the circle is $(x+4)^2+(y-3)^2=50$, which statements are correct?

20 A circle has the equation $(x-3)^2+(y+4)^2=10$. Find the coordinates of the center of the circle and the length of the circle's radius.

G.GPE.A.1: Equations of Circles 1b
Answer Section

1 ANS:
$(-3,4)$

REF: 060506b

2 ANS:
center = $(3,-3)$; radius = 6

REF: 080911ge

3 ANS:
$(-1,3)$ and 4

REF: 080404b

4 ANS:
$(1,-3)$ and $r = 3$

REF: 081502ge

5 ANS:
$(-1,5)$ and 4

REF: 011403ge

6 ANS:
$(2,-3)$ and 6

REF: 011203ge

7 ANS:
$(5,-3)$ and 4

REF: 061114ge

8 ANS:
center = $(0,7)$; radius = 4

REF: 081009ge

9 ANS:
$(3,-8)$, $r = \sqrt{39}$

REF: fall9917b

10 ANS:
$(0,-3)$ and $\sqrt{13}$

REF: 060922ge

11 ANS:
$(3,0)$ and $2\sqrt{2}$

REF: 061422ge

12 ANS:
$(2,-5)$ and $4\sqrt{2}$

REF: 011318ge
13 ANS:
$(-3,5)$ and $4\sqrt{3}$
$r^2 = 48$
$r = \sqrt{48} = \sqrt{16} \cdot \sqrt{3} = 4\sqrt{3}$

REF: 081412ge
14 ANS:
center = (A,B); radius = $\sqrt{C}$

REF: fall0814ge
15 ANS:
IV

REF: 010620b
16 ANS:
IV

REF: 011426ge
17 ANS: 1 REF: 061223ge
18 ANS: 4 REF: 061319ge
19 ANS:
B and C
$r^2 = 50$
$r = \sqrt{50} = \sqrt{25}\sqrt{2} = 5\sqrt{2}$

REF: 061515ge
20 ANS:
center: $(3,-4)$; radius: $\sqrt{10}$

REF: 081333ge