G.G.73: Equations of Circles: Find the center and radius of a circle, given the equation of the circle in center-radius form

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

2 What are the center and the radius of the circle whose equation is $(x-3)^2+(y+3)^2=36$
1) center = $(3,-3)$; radius = 6
2) center = $(-3,3)$; radius = 6
3) center = $(3,-3)$; radius = 36
4) center = $(-3,3)$; radius = 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?
1) $(-1,3)$ and 4
2) $(1,-3)$ and 4
3) $(-1,3)$ and 16
4) $(1,-3)$ and 16

4 What are the coordinates of the center and the length of the radius of the circle whose equation is $(x+1)^2+(y-5)^2=16$?
1) $(1,-5)$ and 16
2) $(-1,5)$ and 16
3) $(1,-5)$ and 4
4) $(-1,5)$ and 4

5 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?
1) $(-2,3)$ and 6
2) $(2,-3)$ and 6
3) $(-2,3)$ and 36
4) $(2,-3)$ and 36

6 What are the center and the radius of the circle whose equation is $(x-5)^2+(y+3)^2=16$?
1) $(-5,3)$ and 16
2) $(5,-3)$ and 16
3) $(-5,3)$ and 4
4) $(5,-3)$ and 4

7 The equation of a circle is $x^2+(y-7)^2=16$. What are the center and radius of the circle?
1) center = $(0,7)$; radius = 4
2) center = $(0,7)$; radius = 16
3) center = $(0,-7)$; radius = 4
4) center = $(0,-7)$; radius = 16

8 The center and radius of the given circle $(x-3)^2+(x+8)^2=39$ are:
1) $(3,-8)$, $r=39$
2) $(-3,-8)$, $r=\sqrt{39}$
3) $(-3,8)$, $r=\sqrt{39}$
4) $(3,-8)$, $r=\sqrt{39}$

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9 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?
1) $(0, 3)$ and 13
2) $(0, 3)$ and $\sqrt{13}$
3) $(0, -3)$ and 13
4) $(0, -3)$ and $\sqrt{13}$

10 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?
1) $(-2, 5)$ and 16
2) $(2, -5)$ and 16
3) $(-2, 5)$ and $4\sqrt{2}$
4) $(2, -5)$ and $4\sqrt{2}$

11 What are the center and radius of a circle whose equation is $(x-A)^2 + (y-B)^2 = C$?
1) center = (A, B); radius = C
2) center = $(-A, -B)$; radius = C
3) center = (A, B); radius = $\sqrt{C}$
4) center = $(-A, -B)$; radius = $\sqrt{C}$

12 The center of a circle represented by the equation $(x-2)^2 + (y+3)^2 = 100$ is located in Quadrant
1) I
2) II
3) III
4) IV

13 A circle with the equation $(x+6)^2 + (y-7)^2 = 64$ does *not* include points in Quadrant
1) I
2) II
3) III
4) IV

14 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) $(x-5)^2 + (y-4)^2 = 25$

15 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 $(x-2)^2 + (y-5)^2 = 25$

16 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.