Finding Center/Radius of a Circle Using Conics App

1. What are the coordinates of the center and length of the radius of the circle whose equation is
$x^2 + 6x + y^2 - 4y = 23$?
1) $(3,-2)$ and 36
2) $(3,-2)$ and 6
3) $(-3,2)$ and 36
4) $(-3,2)$ and 6

2. The equation of a circle is $x^2 + y^2 + 12x = -27$. What are the coordinates of the center and the
length of the radius of the circle?
1) center $(6,0)$ and radius 3   3) center $(-6,0)$ and radius 3
2) center $(6,0)$ and radius 9   4) center $(-6,0)$ and radius 9

3. Find the center and radius of a circle whose equation is $x^2 + y^2 - 16x + 6y + 53 = 0$?
1) center $(-8,3)$ and radius 20
2) center $(-8,3)$ and radius $2\sqrt{5}$
3) center $(8,-3)$ and radius 20
4) center $(8,-3)$ and radius $2\sqrt{5}$

4. Find the center and radius of a circle whose equation is $x^2 + y^2 - 2x + 6y + \dfrac{15}{4} = 0$?

1)
center $= (-1,3)$; radius $= \dfrac{25}{4}$

2)
center $= (-1,3)$; radius $= \dfrac{5}{2}$

3)
center $= (1,-3)$; radius $= \dfrac{25}{4}$

4)
center $= (1,-3)$; radius $= \dfrac{5}{2}$

5. An equation of circle M is $x^2 + y^2 + 6x - 2y + 1 = 0$. What are the coordinates of the center and
the length of the radius of circle M?
1) center $(3,-1)$ and radius 9   3) center $(-3,1)$ and radius 9
2) center $(3,-1)$ and radius 3   4) center $(-3,1)$ and radius 3

6. The equation of a circle is $x^2 + y^2 + 6y = 7$. What are the coordinates of the center and the length of the radius of the circle?
1) center $(0,3)$ and radius 4
2) center $(0,-3)$ and radius 4
3) center $(0,3)$ and radius 16
4) center $(0,-3)$ and radius 16

7. What are the coordinates of the center and length of the radius of the circle whose equation is $x^2 + y^2 + 2x - 16y + 49 = 0$?
1) center $(1,-8)$ and radius 4
2) center $(-1,8)$ and radius 4
3) center $(1,-8)$ and radius 16
4) center $(-1,8)$ and radius 16

8. What are the coordinates of the center and the length of the radius of the circle whose equation is $x^2 + y^2 - 12y - 20.25 = 0$?
1) center $(0,6)$ and radius 7.5
2) center $(0,-6)$ and radius 7.5
3) center $(0,12)$ and radius 4.5
4) center $(0,-12)$ and radius 4.5

9. What is an equation of a circle whose center is $(1,4)$ and diameter is 10?
1) $x^2 - 2x + y^2 - 8y = 8$
2) $x^2 + 2x + y^2 + 8y = 8$
3) $x^2 - 2x + y^2 - 8y = 83$
4) $x^2 + 2x + y^2 + 8y = 83$

10. What is an equation of circle O shown in the graph below?
1) $x^2 + 10x + y^2 + 4y = -13$
2) $x^2 - 10x + y^2 - 4y = -13$
3) $x^2 + 10x + y^2 + 4y = -25$
4) $x^2 - 10x + y^2 - 4y = -25$