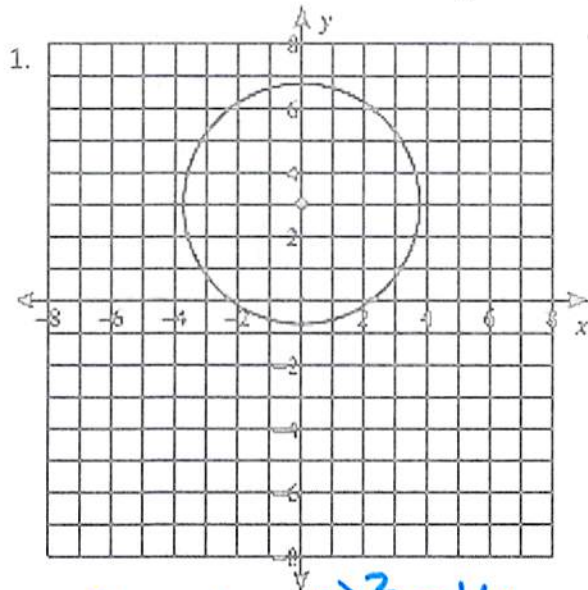


# Key!

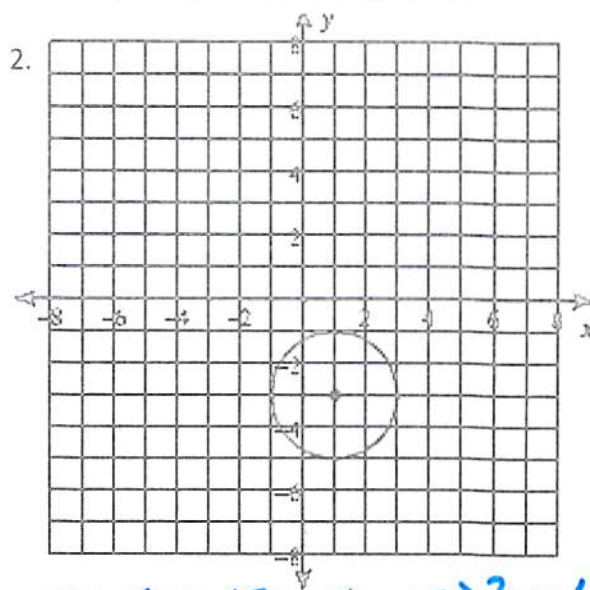
Directions: Write the standard and general equations. Then, find the area of each circle.



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

$$G: x^2 + y^2 - 6y - 7 = 0$$

$$A: 16\pi \text{ units}^2$$



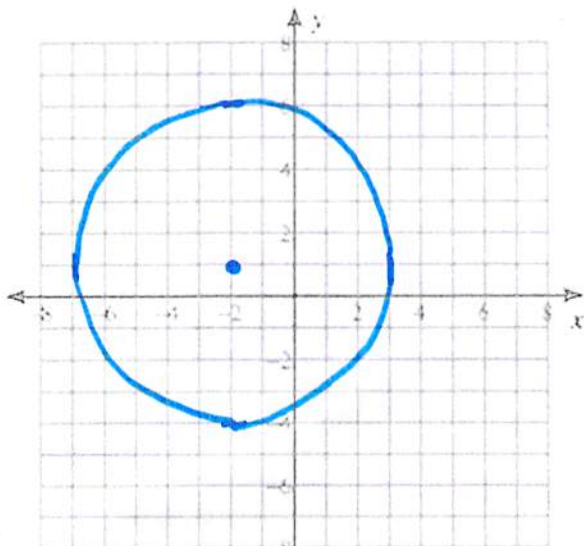
$$S: (x-1)^2 + (y+3)^2 = 4$$

$$G: x^2 + y^2 - 2x + 6y - 6 = 0$$

$$A: 4\pi \text{ units}^2$$

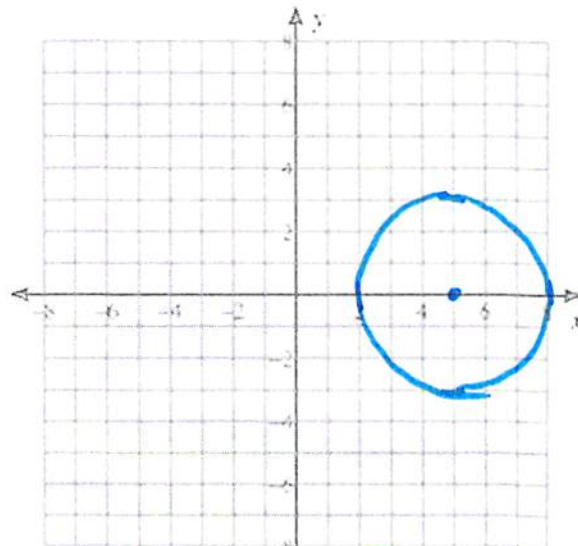
Directions: Write the equation in standard form. Then, sketch the circle on the graph provided.

3.  $y^2 + 4x - 20 - 2y = -x^2$



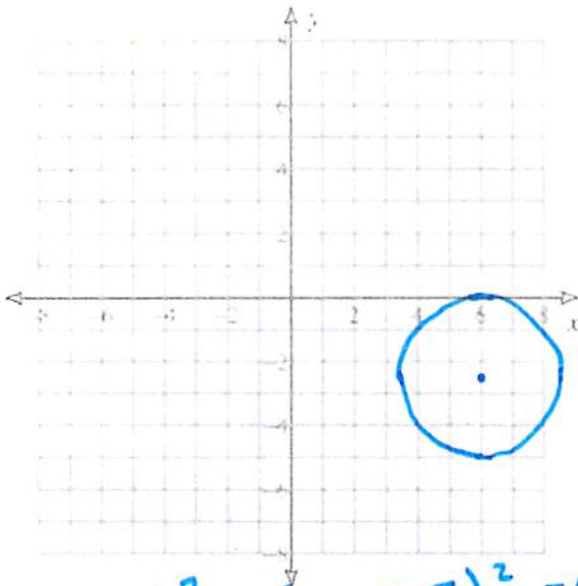
$$(x+2)^2 + (y-1)^2 = 25$$

4. Center lies in the first quadrant Tangent to  $x = 8$ ,  $y = 3$ , and  $x = 2$



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

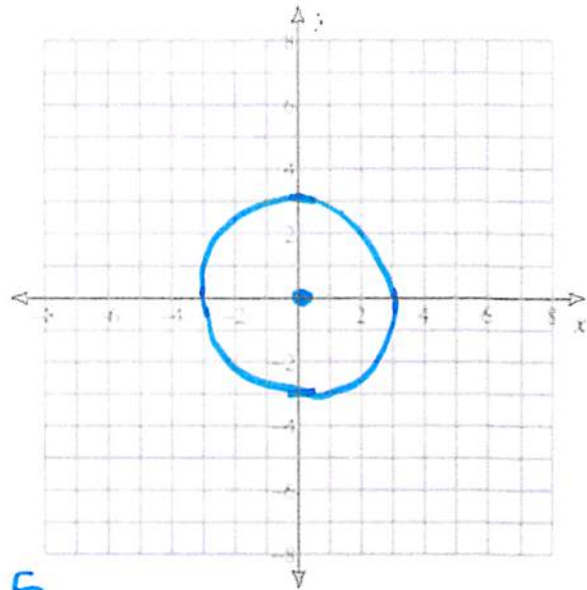
5. Ends of a diameter: (8, -1) and (4, -4)



$$(x-6)^2 + (y+2.5)^2 = 6.25$$

6.  $-9 = -y^2 - x^2$

$$x^2 + y^2 = 9$$



Directions: Find each equation in standard form. Find the circumference of the even questions.

7. Given the center at (0, -4) with a diameter of 2.

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

$$C: 2\pi$$

9.  $16 + x^2 + y^2 - 8x - 6y = 0$

$$(x-4)^2 + (y-3)^2 = 9$$

8. Given the center is at (3, 2) and another point on the circle is (5, 6).

$$(x-3)^2 + (y-2)^2 = 20$$

$$C: 4\sqrt{5}\pi$$

10. Center: (0, 13) Area:  $25\pi$

$$x^2 + (y-13)^2 = 25$$

$$C: 10\pi$$

11. A center at (2, -1) and tangent to the y-axis.

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

12. My circular pool has an area of  $16\pi$ . If I plotted it onto a graph, two points would be (0, 2) & (6, -4).

this distance is greater than the diameter.  
Cannot work, sorry!