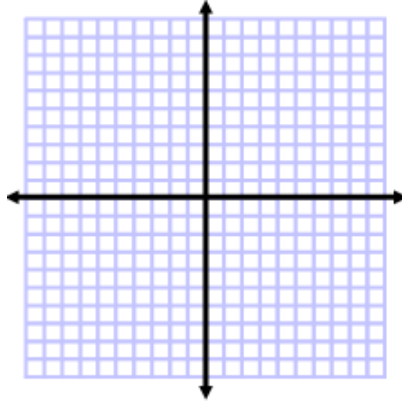


Determine the center and radius of each circle. Then sketch the graph.

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

Center = _____

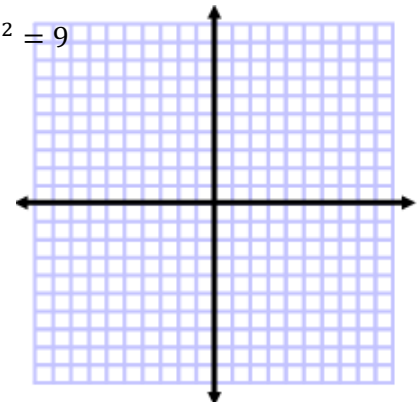
Radius = _____



4. $(x - 1)^2 + (y - 4)^2 = 9$

Center = _____

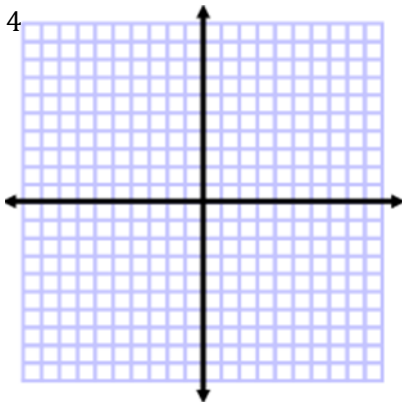
Radius = _____



2. $(x + 5)^2 + (y - 3)^2 = 4$

Center = _____

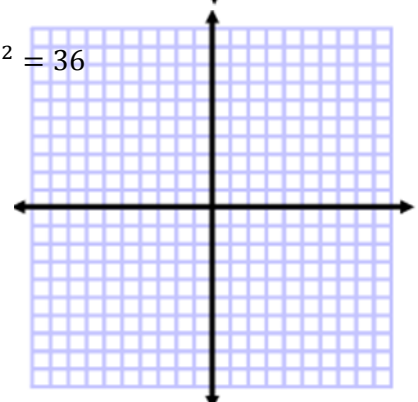
Radius = _____



5. $(x + 3)^2 + (y + 3)^2 = 36$

Center = _____

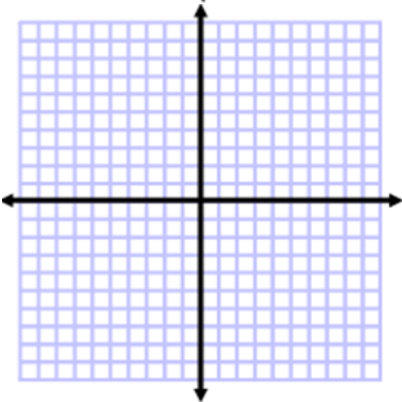
Radius = _____



3. $x^2 + (y + 7)^2 = 1$

Center = _____

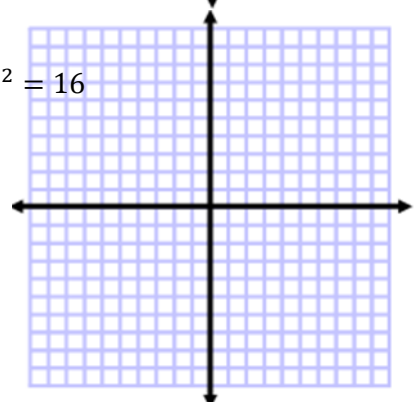
Radius = _____



6. $(x - 5)^2 + (y + 2)^2 = 16$

Center = _____

Radius = _____



Determine whether the equation is a parabola, circle, or neither.

7. $x^2 + y^2 = 25$

8. $y = -2(x - 1)^2 + 6$

9. $y^2 + (x - 2)^2 - 16 = 0$

10. $x - y = 2$

11. $x + (y - 7)^2 = 3$

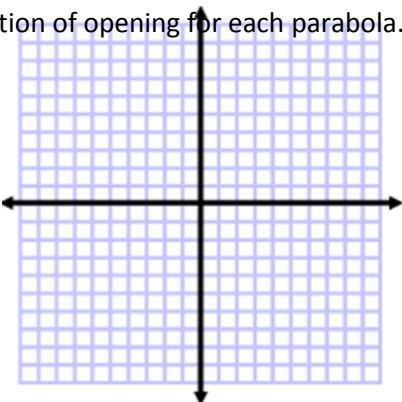
12. $(x - 5)^3 + (y - 4)^2 = 64$

Determine the vertex and direction of opening for each parabola. Then sketch the graph.

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

Vertex = _____

Dir Open = _____



14. $y = 3x^2 - 4$

Vertex = _____

Dir Open = _____

