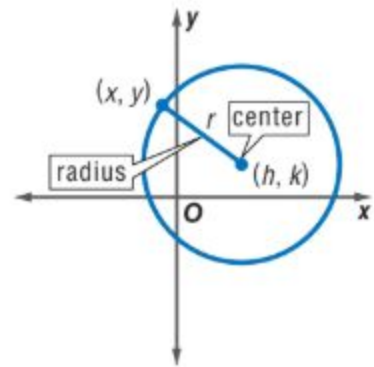


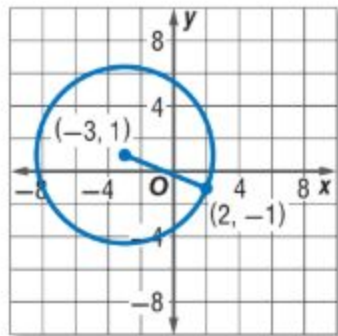
Midpoint Formula:

Distance Formula:

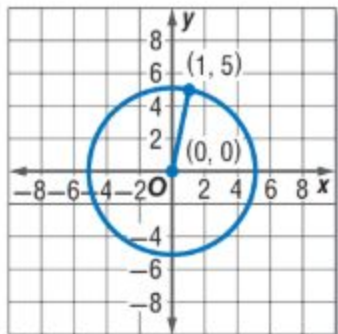
Circle:



1. Write an equation for the graph:
  - a.



b.

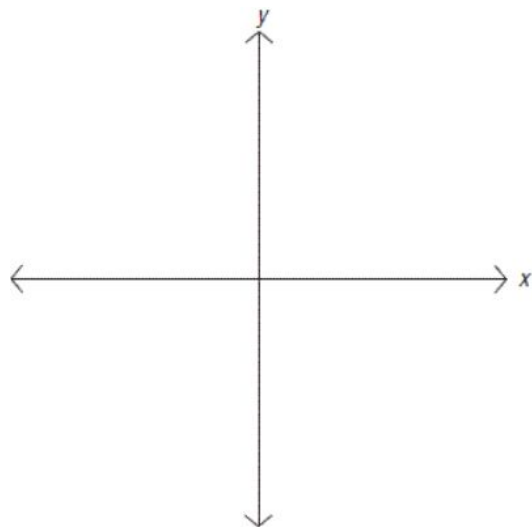


2. Write an equation for a circle if the endpoints of a diameter are at  $(7, 6)$  and  $(-1, -8)$ .

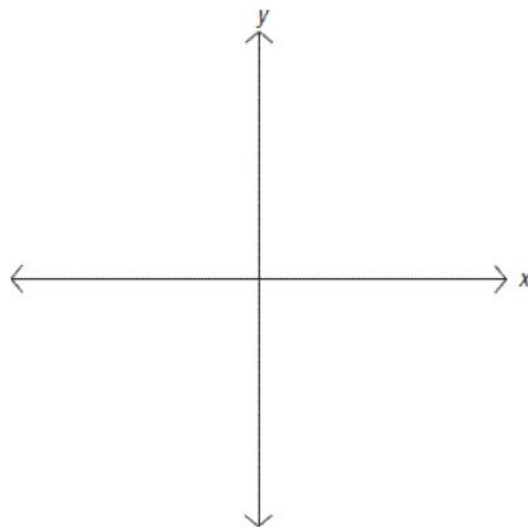
3. Write an equation for a circle if the endpoints of a diameter are at  $(3, -3)$  and  $(1, 5)$ .

4. Find the center and radius of each circle. Then graph the circle.

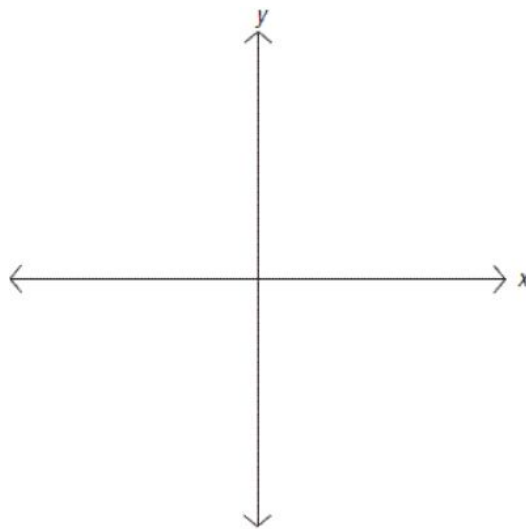
a.  $x^2 + (y - 7)^2 = 9$



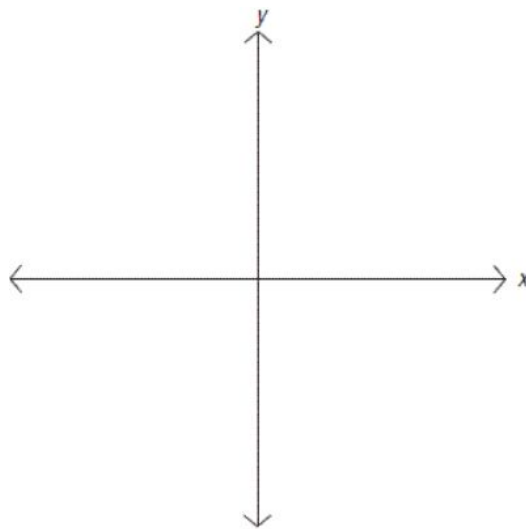
b.  $(x - 4)^2 + (y - 4)^2 = 25$



c.  $x^2 + y^2 - 4x + 8y - 5 = 0$



d.  $x^2 + y^2 - 8x + 12y - 12 = 0$



e.  $x^2 + y^2 + 4x - 10y - 7 = 0$

