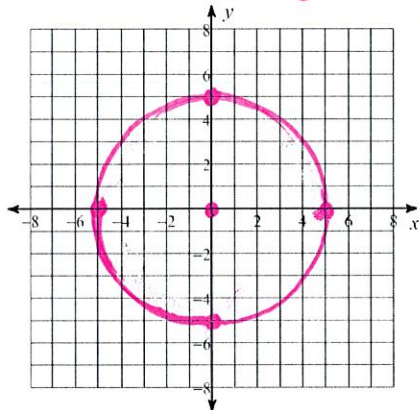


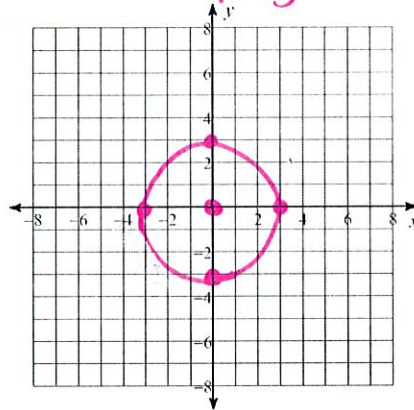
Day 7 Practice - Equations of Circles

Identify the center and radius of each. Then sketch the graph.

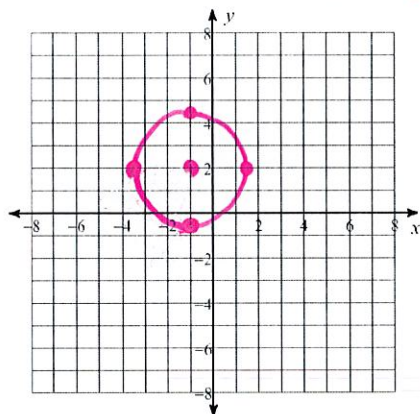
1) $x^2 + y^2 = 25$
 $C = (0, 0)$
 $r = 5$



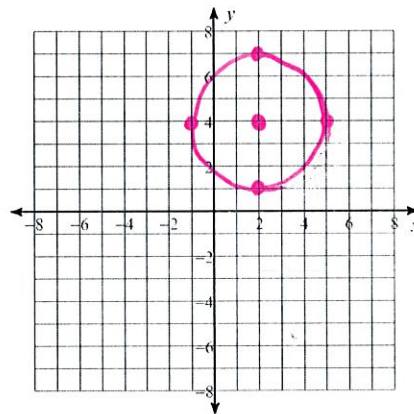
2) $x^2 + y^2 = 9$
 $C = (0, 0)$
 $r = 3$



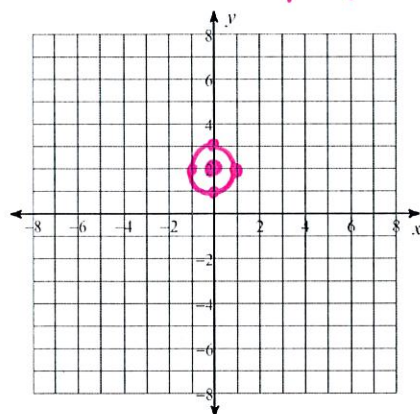
3) $(x + 1)^2 + (y - 2)^2 = 5$
 $C = (-1, 2)$
 $r = \sqrt{5} \approx 2.24$



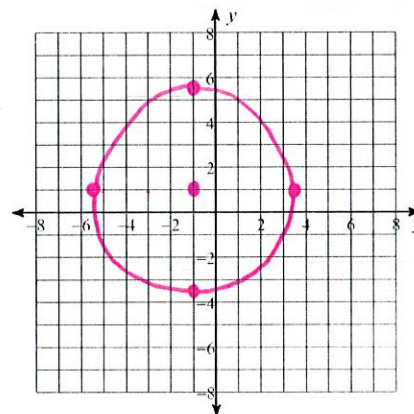
4) $(x - 2)^2 + (y - 4)^2 = 9$
 $C = (2, 4)$
 $r = 3$



5) $x^2 + (y - 2)^2 = 1$
 $C = (0, 2)$
 $r = 1$



6) $(x + 1)^2 + (y - 1)^2 = 21$
 $C = (-1, 1)$
 $r = \sqrt{21} \approx 4.58$



Use the information provided to write the equation of each circle.

7) Center: $(-3, -10)$

Radius: 7

$$(x+3)^2 + (y+10)^2 = 49$$

8) Center: $(-5, -8)$

Radius: 10

$$(x+5)^2 + (y+8)^2 = 100$$

9) Center: $(5, 2)$

Radius: 14

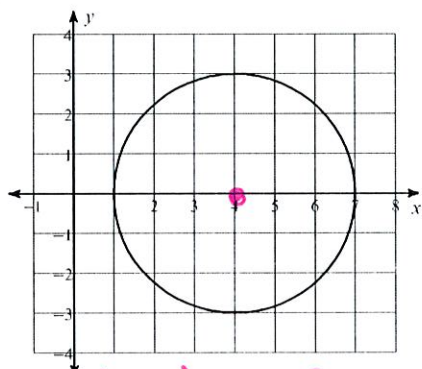
$$(x-5)^2 + (y-2)^2 = 196$$

10) Center: $(12, -16)$

Radius: 2

$$(x-12)^2 + (y+16)^2 = 4$$

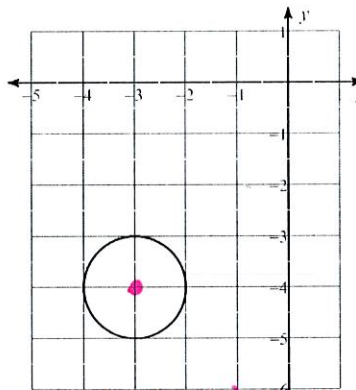
11)



$$C = (4, 0) \quad r = 3$$

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

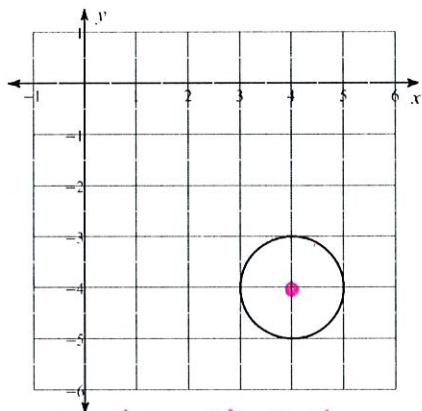
12)



$$C = (-3, -4) \quad r = 1$$

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

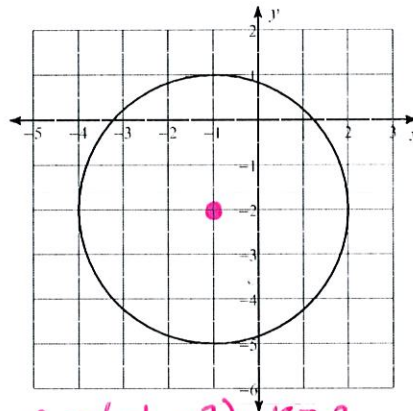
13)



$$C = (4, -4) \quad r = 1$$

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

14)



$$C = (-1, -2) \quad r = 3$$

$$(x+1)^2 + (y+2)^2 = 9$$