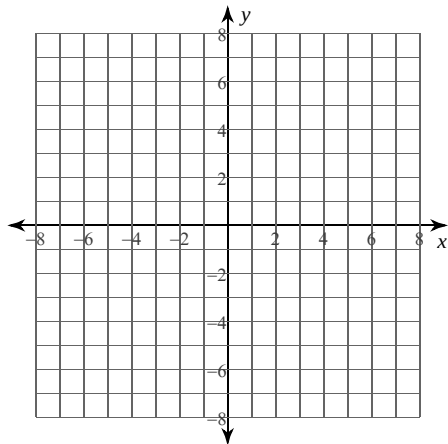
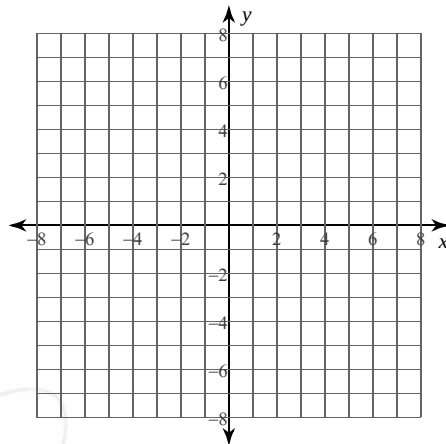


Identify the center and radius of each. Then sketch the graph.

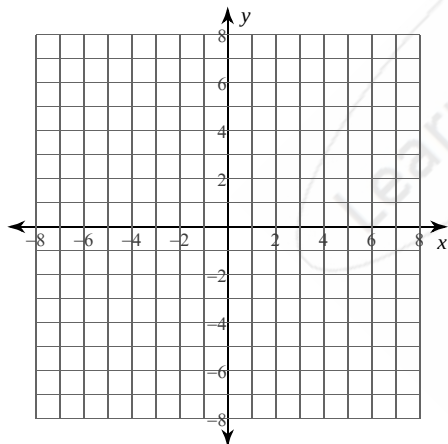
1) $x^2 + (y + 2)^2 = 4$



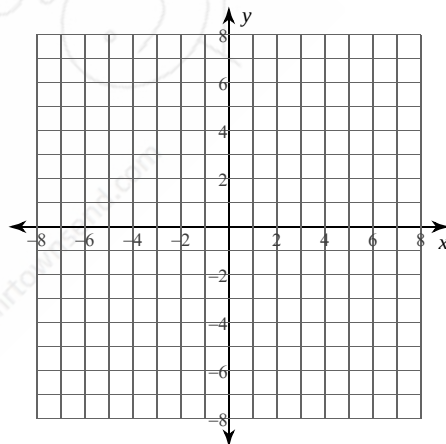
2) $(x - 3)^2 + (y + 4)^2 = 9$



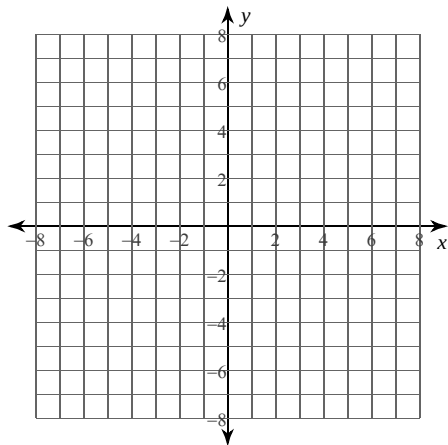
3) $(x - 2)^2 + (y - 3)^2 = 16$



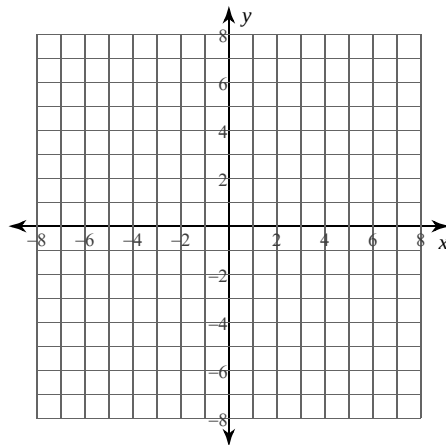
4) $(x + 3)^2 + (y - 2)^2 = 9$



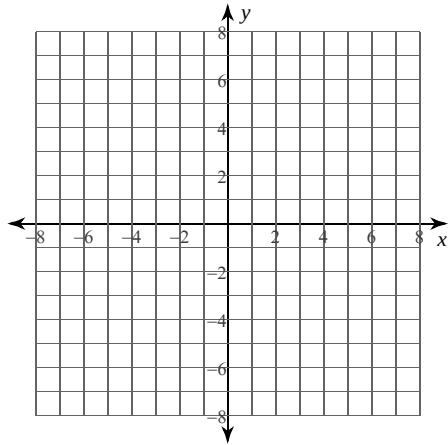
5) $(x + 2)^2 + y^2 = 25$



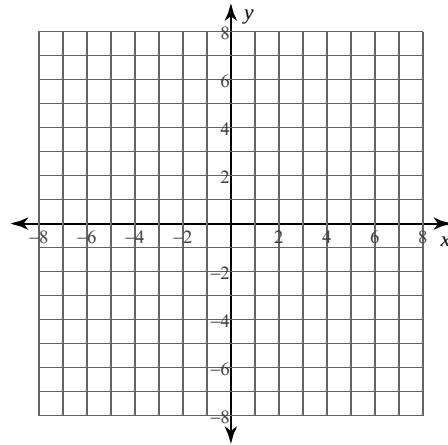
6) $(x + 3)^2 + (y - 2)^2 = 5$



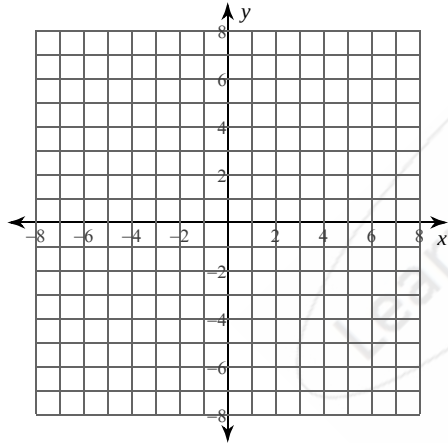
7) $(x + 3)^2 + (y + 1)^2 = 9$



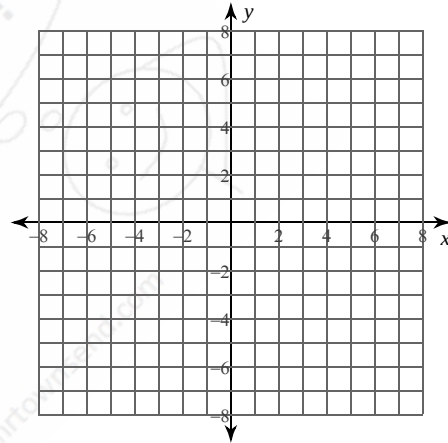
8) $(x + 1)^2 + (y - 2)^2 = 16$



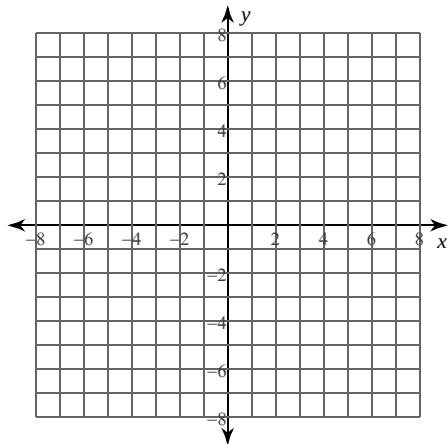
9) $(x - 1)^2 + (y - 1)^2 = 4$



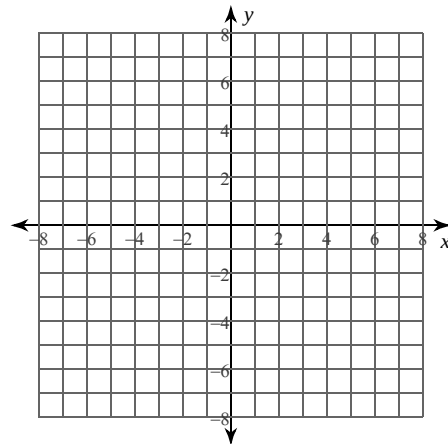
10) $(x - 4)^2 + (y - 3)^2 = 4$



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

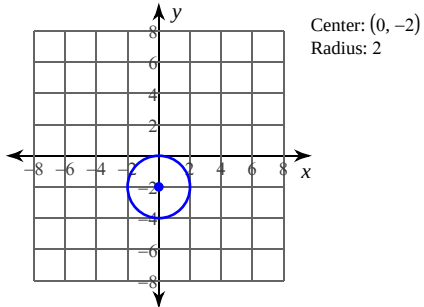


12) $(x - 4)^2 + (y + 2)^2 = 4$

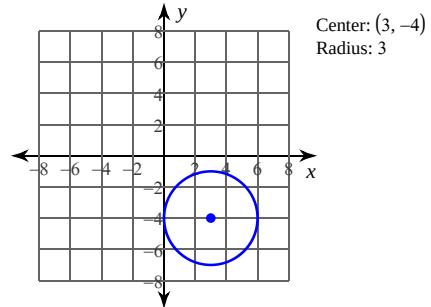


Answers to

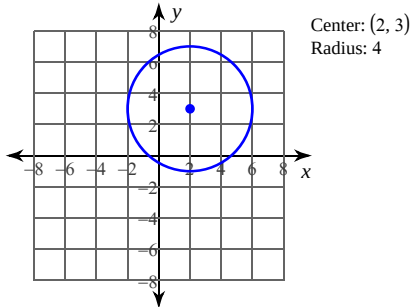
1)



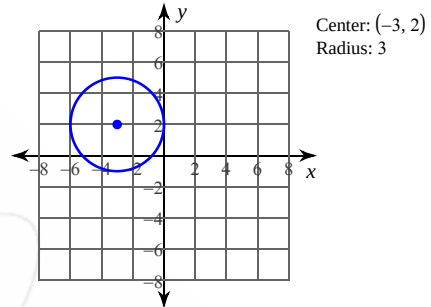
2)



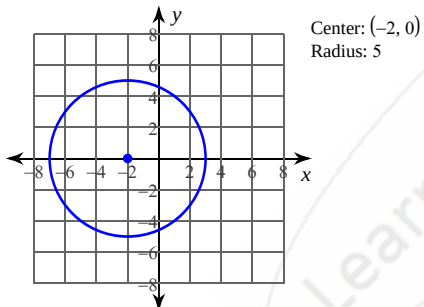
3)



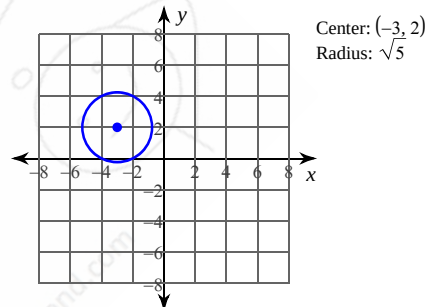
4)



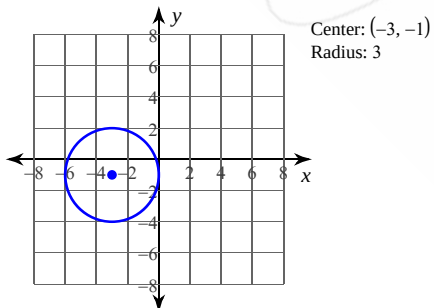
5)



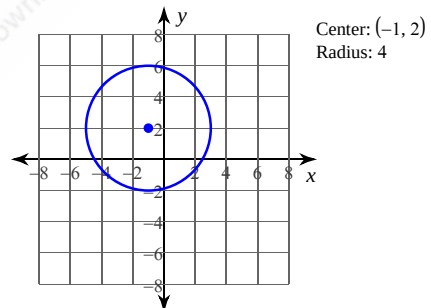
6)



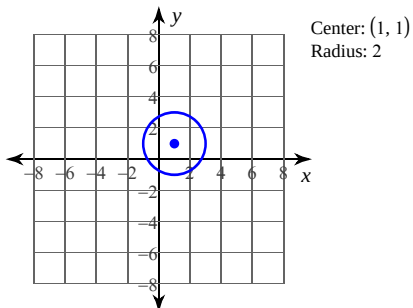
7)



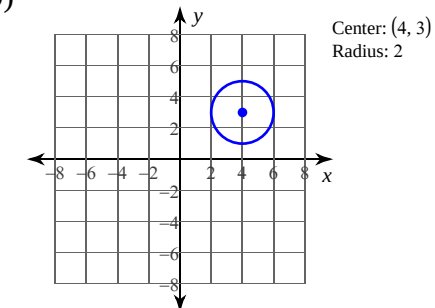
8)



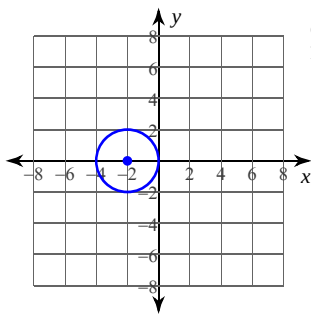
9)



10)

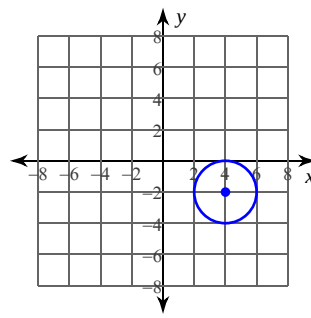


11)



Center: $(-2, 0)$
Radius: 2

12)



Center: $(4, -2)$
Radius: 2

