

Name _____

Date _____

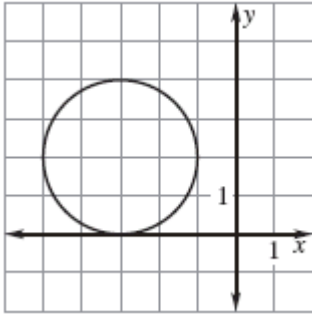
LESSON 10.7

Practice C

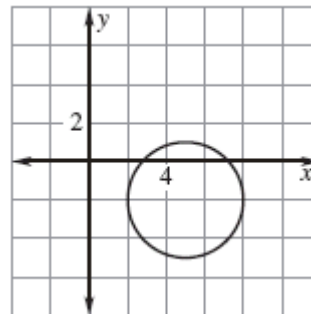
For use with pages 699–705

Write the standard equation of the circle

1.



2.



Write the standard equation of the circle with the given center and radius.

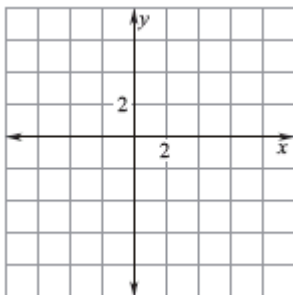
3. Center $(4.1, 2.5)$, radius 3
4. Center $(3.7, -6.2)$, radius 5
5. Center $(\frac{3}{2}, \frac{5}{2})$, radius $\frac{1}{2}$
6. Center $(\frac{4}{3}, \frac{7}{2})$, radius 2

Use the given information to write the standard equation of the circle.

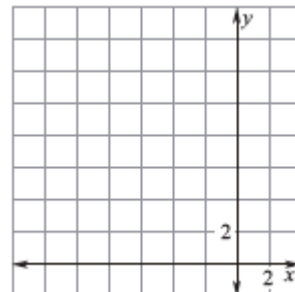
7. The center is $(-5, -2)$, and a point on the circle is $(7, 14)$.
8. The center is $(-1, 2)$, and a point on the circle is $(47, 16)$.

Graph the equation.

9. $(x - 3)^2 + (y + 4)^2 = 16$

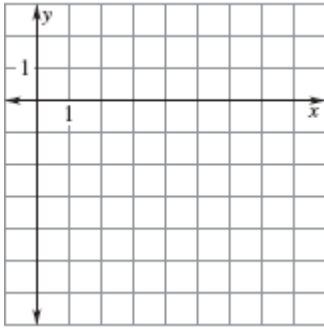


10. $(x + 5)^2 + (y - 7)^2 = 25$

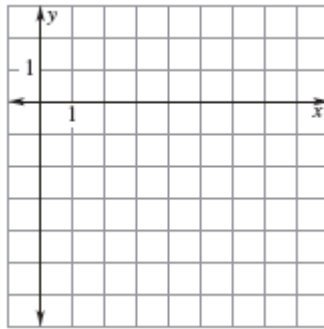


Graph the circle $(x - 4)^2 + (y + 2)^2 = 16$ and the line with the given equation. Determine whether the line is a tangent or secant. *Explain.*

11. $y = x - 2$



12. $y = -x + 6$



Find the center and radius of the circle.

13. $x^2 + y^2 + 4x + 6y - 36 = 0$

14. $x^2 + y^2 - 10x + 8y - 23 = 0$

15. $x^2 + y^2 + 2x - 35 = 0$

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

17. $x^2 + y^2 + 6x - 14y - 12 = 0$

18. $x^2 + y^2 - 8x - 4y + 18 = 0$