Name _____ Date _____

Circles HW Lesson 2

Write an equation of a circle with the given center and radius.

1. $(0, 0), r = 10$

2. $(-4, -6), r = 7$

3. $(2, 3), r = 4$

4. $(-6, 5), r = 5$

Write an equation for each translation.

5. $x^2 + y^2 = 9$; left 2, down 1

6. $x^2 + y^2 = 36$; right 4, up 5

For each equation, find the center and radius of the circle.

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

8. $(x - 3)^2 + (y - 1)^2 = 25$

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

10. $x^2 + (y + 6)^2 = 121$

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

11. center $(1, -2)$, through $(2, 1)$

12. center $(6, 4)$, circumference 6π

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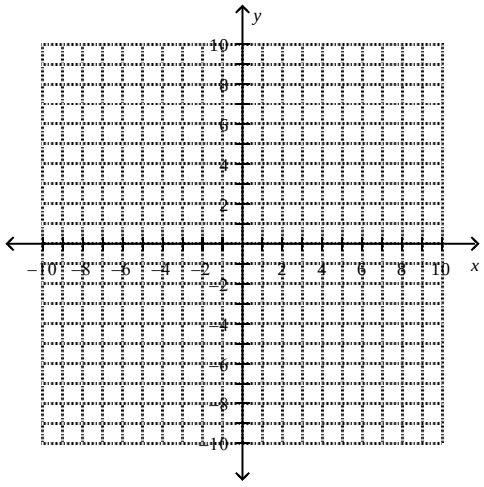
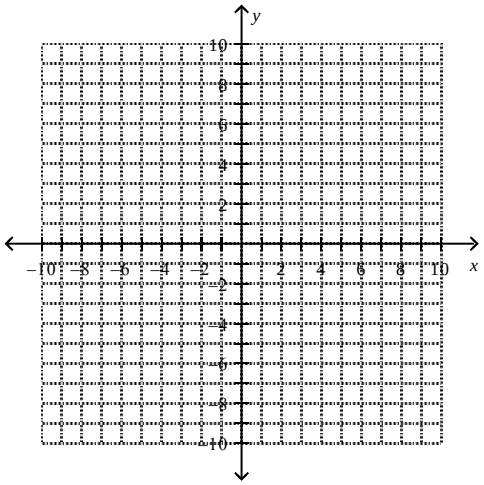
Sketch the graph of the circle.

13. $(x-7)^2+(y+3)^2=36$

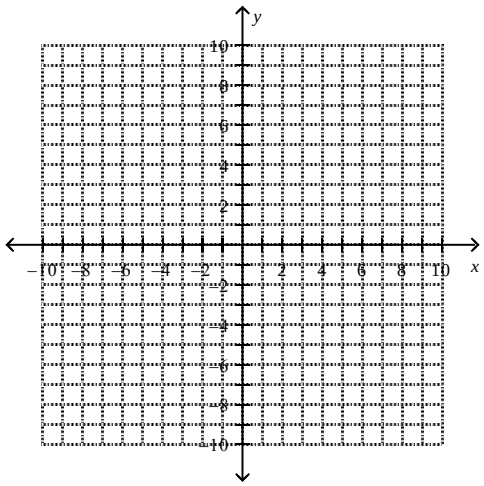
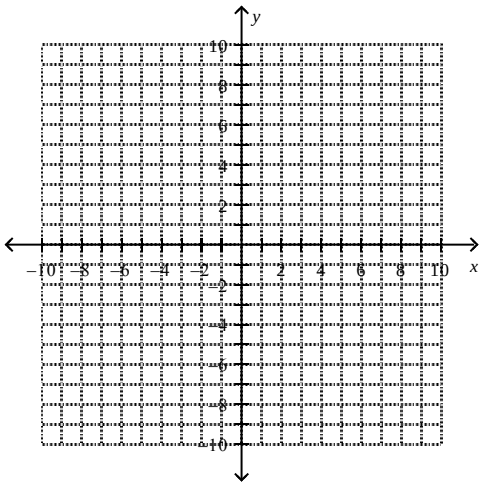


14. $(x+3)^2+(y-2)^2=25$



Rewrite the circle in standard form by completing the square. Then identify the center and sketch the graph.

15. $x^2+y^2+14y=-13$



16. $x^2+y^2-2x+2y=7$