Name _____ Date _____

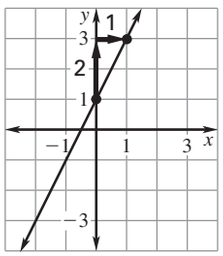
LESSON 4.5

Practice A

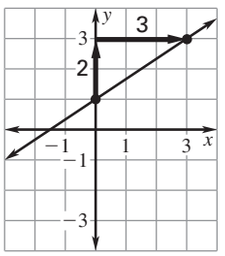
For use with pages 243–250

Identify the slope and *y*-intercept of the line whose graph is shown.

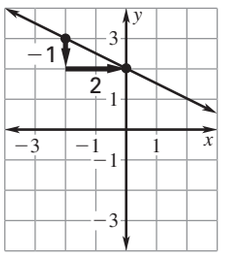
1.



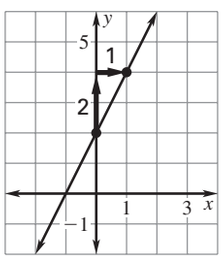
2.



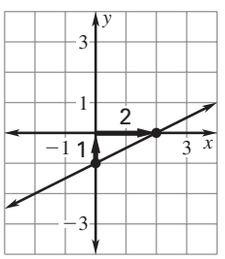
3.



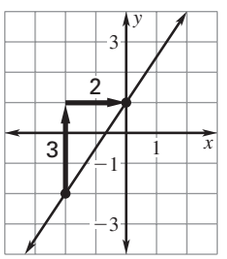
4.



5.



6.



Identify the slope and *y*-intercept of the line with the given equation.

7. $y = 3x + 4$

8. $y = 5x - 2$

9. $y = -2x + 8$

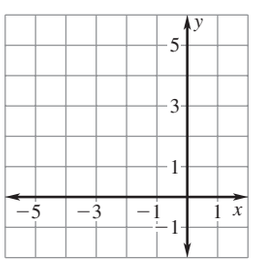
10. $y = \frac{1}{2}x$

11. $y = -\frac{3}{4}x - 1$

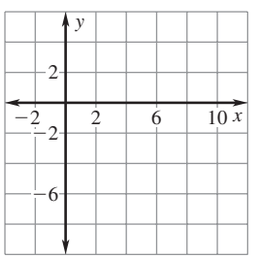
12. $y - 4x = 4$

Graph the equation.

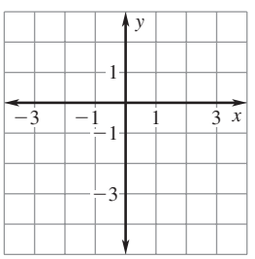
13. $y = x + 5$



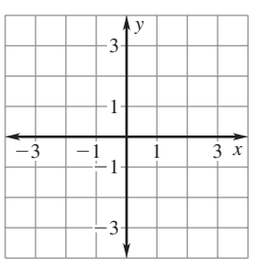
14. $y = x - 7$



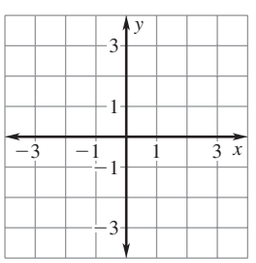
15. $y = 2x - 3$



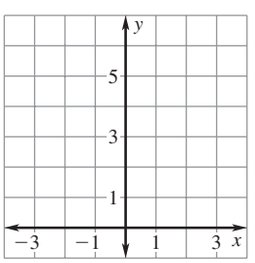
16. $y = -4x + 1$



17. $y = -3x - 1$



18. $y = 6x$



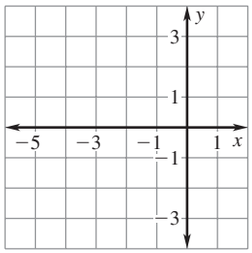
Name _____ Date _____

LESSON 4.5

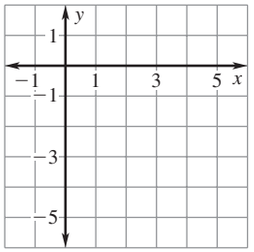
Practice A *continued*

For use with pages 243–250

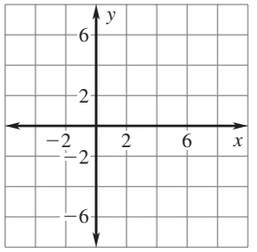
19. $y = \frac{1}{3}x + 2$



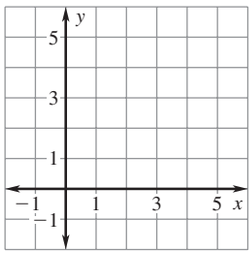
20. $y = \frac{1}{5}x - 4$



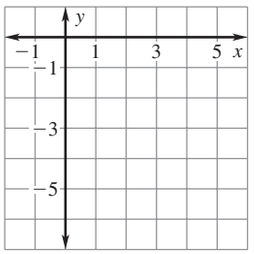
21. $y = \frac{2}{3}x - 4$



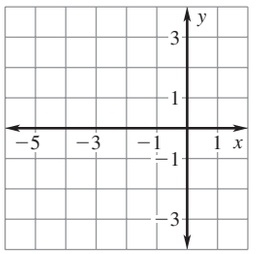
22. $y = -\frac{1}{4}x + 3$



23. $y = -\frac{1}{2}x - 4$



24. $y = \frac{2}{5}x + 1$



Tell whether the graphs of the two equations are parallel lines.

25. $y = 3x - 1, y = 4 + 3x$

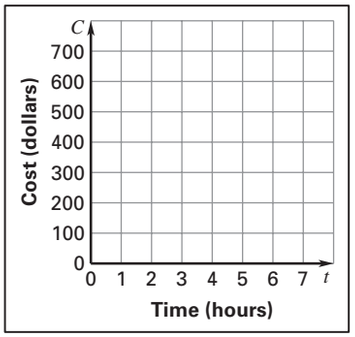
26. $y = 5x + 2, y = 6 - 5x$

27. Landscape Architect A landscape architect charges \$100 for an initial consultation and then charges \$85 an hour to design the landscaping for an area. The total cost C (in dollars) is given by the equation $C = 100 + 85t$ where t is the time (in hours) the architect works on the design.

a. Graph the equation.

b. Suppose the architect raises the fee for the initial consultation to \$125 so that the total cost of a design that takes t hours to create is given by the equation $C = 125 + 85t$. Graph the equation on the same coordinate plane as the equation in part (a).

c. How much more does it cost for a design if it takes the architect 6 hours to create the design?



28. Drum Lessons You are taking drum lessons at a studio. Last year, the studio charged \$10 per lesson. This year, the studio raised its rates and charges \$12 per lesson. The total fee f (in dollars) for taking lessons last year is given by the equation $f = 10\ell$ where ℓ is the number of lessons you took. The total fee this year is given by the equation $f = 12\ell$. Graph the equations in the same coordinate plane. Use the graphs to find the difference between the fees a person could be charged for taking 48 lessons.