Name _____ Date _____

LESSON 3.7

Practice A

For use with the lesson "Graph Linear Functions"

Evaluate the function when $x = -3$, 0, and 2.

1. $f(x) = 10x + 3$

2. $g(x) = 7x - 5$

3. $p(x) = -x + 4$

4. $p(x) = x + 9$

5. $d(x) = -3x + 1$

6. $f(x) = 4x - 3$

7. $h(x) = -2x + 11$

8. $m(x) = -5x - 8$

9. $f(x) = 1.1x$

10. $s(x) = -3.2x$

11. $d(x) = \frac{1}{3}x$

12. $h(x) = -\frac{1}{4}x$

Find the value of x so that the function has the given value.

13. $h(x) = x + 12; 9$

14. $m(x) = 3x - 2; 7$

15. $p(x) = -2x + 5; -1$

16. $f(x) = 4x + 3; 9$

17. $g(x) = -x + 8; 1$

18. $h(x) = 6x - 5; 7$

19. $m(x) = -8x + 10; -6$

20. $p(x) = 8x + 22; 6$

21. $d(x) = -5x - 3; 2$

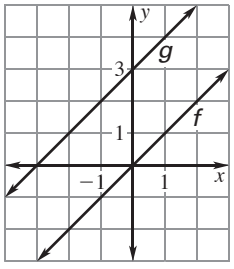
22. $f(x) = 2x - 8; 0$

23. $g(x) = -5x + 10; 20$

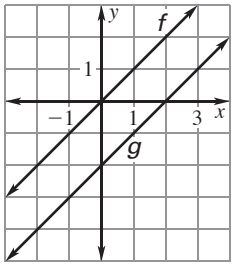
24. $h(x) = -8x + 10; -6$

Compare the graph of $g(x)$ to the graph of $f(x) = x$.

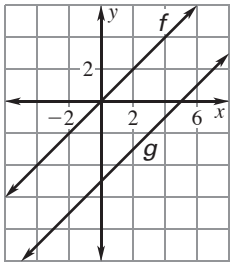
25.



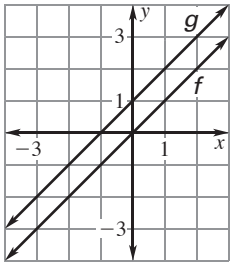
26.



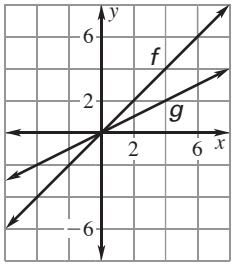
27.



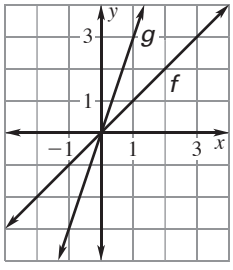
28.



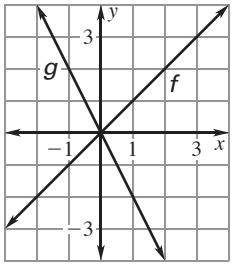
29.



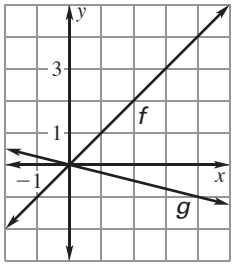
30.



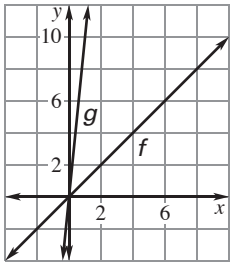
31.



32.



33.



Name _____ Date _____

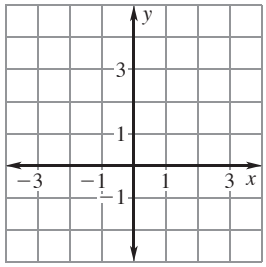
LESSON 3.7

Practice A *continued*

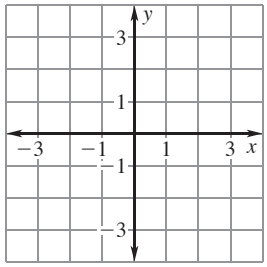
For use with the lesson "Graph Linear Functions"

Graph the function. Compare the graph of $g(x)$ to the graph of $f(x) = x$.

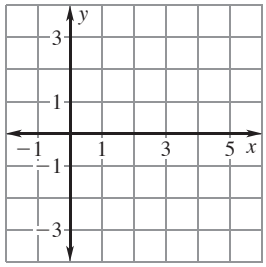
34. $g(x) = x + 4$



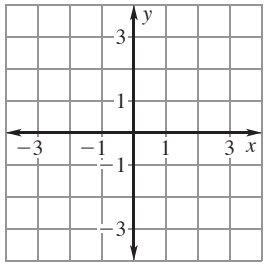
35. $g(x) = x - 3$



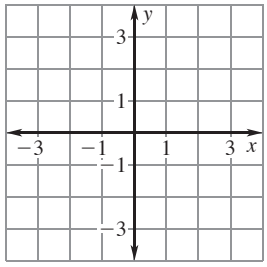
36. $g(x) = \frac{1}{5}x$



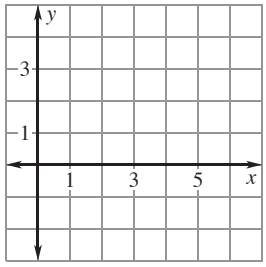
37. $g(x) = 8x$



38. $g(x) = -3x$



39. $g(x) = -\frac{1}{6}x$

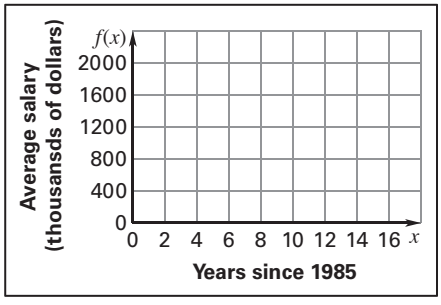


40. Baseball Salaries The average salary (in thousands of dollars) of a major league baseball player from 1985 to 2001 can be modeled by the function $f(x) = 106x + 185$ where x is the number of years since 1985.

a. Graph the function and identify its domain and range.

b. Find the value of $f(x)$ when $x = 5$. *Explain* what the solution means in this situation.

c. Find the value of x so that $f(x) = 1000$. *Explain* what the solution means in this situation.



41. Cable Television The average monthly cost (in dollars) of cable television from 1995 to 2001 can be modeled by the function $f(x) = 1.56x + 21.5$ where x is the number of years since 1995.

a. Graph the function and identify its domain and range.

b. Find the value of x so that $f(x) = 28$. *Explain* what the solution means in this situation.