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Practice

Form K

Slope-Intercept Form

Find the slope and y -intercept of the graph of each equation.

1. $y = -2x + 7$ $m = -2; b = 7$

2. $y = 6x + 11$ $m = 6; b = 11$

3. $y = -7x - 8$ $m = -7; b = -8$

4. $y = -2.5x + 3.2$ $m = -2.57; b = 3.2$

5. $y = -9$ $m = 0; b = -9$

6. $y = \frac{1}{4}x - \frac{2}{7}$ $m = \frac{1}{4}; b = -\frac{2}{7}$

Write an equation of a line with the given slope m and y -intercept b .

7. $m = -5, b = -6$ $y = -5x - 6$

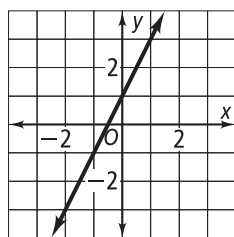
8. $m = 1, b = -4$ $y = x - 4$

9. $m = 0.4, b = -9$ $y = 0.4x - 9$

10. $m = 0, b = 3$ $y = 3$

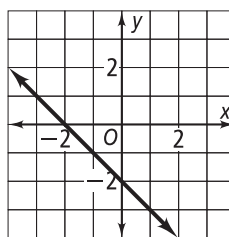
Write an equation in slope-intercept form of each line.

11.



$y = 2x + 1$

12.



$y = -1$

Write an equation in slope-intercept form of the line that passes through the given points.

13. $(-1, 2)$ and $(0, 0)$ $y = -2x$

14. $(-2, 9)$ and $(1, 6)$ $y = -x + 7$

15. $(12, 10)$ and $(16, 8)$ $y = -\frac{1}{2}x + 16$

16. $(-4, -1)$ and $(-8, 7)$ $y = -2x - 9$

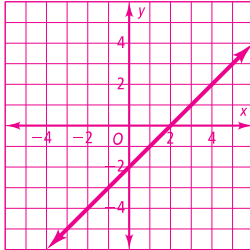
5-3

Practice (continued) Slope-Intercept Form

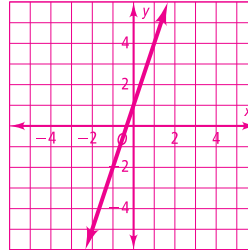
Form K

Graph each equation.

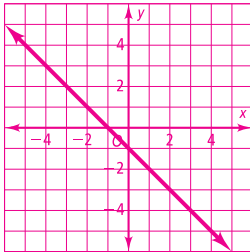
17. $y = x - 2$



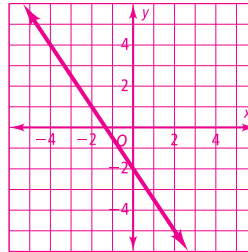
18. $y = 3x + 1$



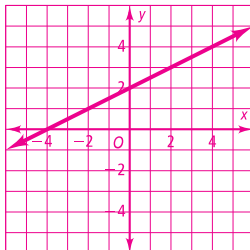
19. $y = -x - 1$



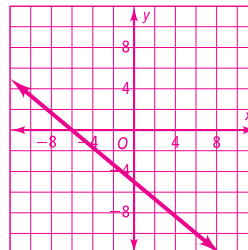
20. $y = -3x - 2$



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



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



23. A car is traveling at 45 mi/h. Write an equation that models the total distance d traveled after h hours. What is the graph of the equation?

$d = 45h$

