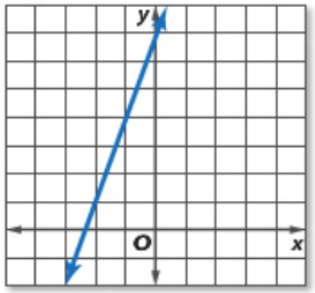
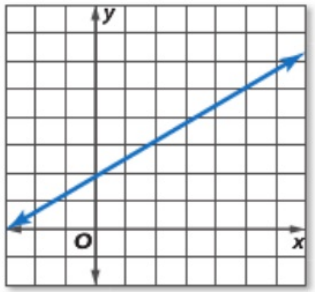
Write an equation in slope-intercept form for each graph shown. (Lesson 4-1)

1. 

$y = 3x + 7$

2. 

$y = \frac{3}{5}x + 2$

Graph each equation. (Lesson 4-1) **3–4. See Ch. 4 Answer Appendix.**

3. $y = 2x + 3$

4. $y = \frac{1}{3}x - 2$

5. **BOATS** Write an equation in slope-intercept form for the total rental cost C for a pontoon boat used for t hours. (Lesson 4-1) $C = 60t + 20$

11. **MULTIPLE CHOICE** Write an equation of the line that passes through the point (0, 0) and has slope −4. (Lesson 4-2) **C**

A $y = x - 4$ **C** $y = -4x$

B $y = x + 4$ **D** $y = 4 - x$

12. $y - 4 = 6(x - 1)$ **13.** $y + 1 = -3(x + 2)$

Write an equation in point-slope form for the line that passes through each point with the given slope. (Lesson 4-3)

12. (1, 4), $m = 6$

13. (−2, −1), $m = -3$

14. Write an equation in point-slope form for the line that passes through the point (8, 3), $m = -2$. (Lesson 4-3)

15. Write $y + 3 = \frac{1}{2}(x - 5)$ in standard form. (Lesson 4-3)

16. Write $y + 4 = -7(x - 3)$ in slope-intercept form. (Lesson 4-3) $y = -7x + 17$

14. $y - 3 = -2(x - 8)$ **15.** $x - 2y = 11$

Write each equation in standard form. (Lesson 4-3)

17. $y - 5 = -2(x - 3)$ $2x + y = 11$

18. $y + 4 = \frac{2}{3}(x - 3)$ $2x - 3y = 18$

Write each equation in slope-intercept form. (Lesson 4-3)

19. $y - 3 = 4(x + 3)$ $y = 4x + 15$

20. $y + 1 = \frac{1}{2}(x - 8)$ $y = \frac{1}{2}x - 5$

21. **MULTIPLE CHOICE** Determine whether the graphs of the are *parallel, perpendicular* or *neither*

3. $y = 2x + 3$ 4. $y = \frac{1}{3}x - 2$

5. **BOATS** Write an equation in slope-intercept form for the total rental cost C for a pontoon boat used for t hours. (Lesson 4-1) $C = 60t + 20$

Write an equation of the line with the given conditions. (Lesson 4-2)

6. (2, 5); slope 3 $y = 3x - 1$
7. $(-3, -1)$, slope $\frac{1}{2}$ $y = \frac{1}{2}x + \frac{1}{2}$
8. $(-3, 4)$, $(1, 12)$ $y = 2x + 10$
9. $(-1, 6)$, $(2, 4)$ $y = -\frac{2}{3}x + \frac{16}{3}$
10. (2, 1), slope 0 $y = 1$

Write each equation in slope-intercept form. (Lesson 4-3)

19. $y - 3 = 4(x + 3)$ $y = 4x + 15$
20. $y + 1 = \frac{1}{2}(x - 8)$ $y = \frac{1}{2}x - 5$

21. **MULTIPLE CHOICE** Determine whether the graphs of the pair of equations are *parallel*, *perpendicular*, or *neither*. (Lesson 4-4) **F**

$$y = -6x + 8$$
$$3x + \frac{1}{2}y = -3$$

F parallel

G perpendicular

H neither

J not enough information

Write an equation in slope-intercept form for the line that passes through the given point and is perpendicular to the graph of the equation. (Lesson 4-4)

22. (3, −4); $y = -\frac{1}{3}x - 5$ $y = 3x - 13$
23. (0, −3); $y = -2x + 4$ $y = \frac{1}{2}x - 3$
24. (−4, −5); $-4x + 5y = -6$ $y = -\frac{5}{4}x - 10$
25. (−1, −4); $-x - 2y = 0$ $y = 2x - 2$