Name _____ Class _____ Date _____

Practice 5-4

Example Exercises

Example 1

Graph each equation.

1. $y = 2x + 1$ **2.** $y = 3x$ **3.** $y = -2x + 3$ **4.** $y = 4x + 2$

5. $y = \frac{2}{3}x + 3$ **6.** $y = -\frac{3}{2}x$ **7.** $y = -x - 2$ **8.** $y = -\frac{7}{3}x + 2$

9. $y = -4x + 1$ **10.** $y = x + 3$ **11.** $y = \frac{1}{3}x - 3$ **12.** $y = \frac{3}{5}x - 4$

Example 2

Rewrite each equation in slope-intercept form. Then graph each equation.

13. $y + 4 = 3x$ **14.** $y - 5x = 6$ **15.** $y = -5 + 2x$ **16.** $y + x = -4$

17. $y + \frac{4}{3}x = 1$ **18.** $y - \frac{1}{4}x = 3$ **19.** $y = -\frac{5}{2}x - 2$ **20.** $y - 5 = \frac{5}{4}x$

21. $y - 3x = 0$ **22.** $y - 5 = x$ **23.** $y + \frac{1}{4}x = 2$ **24.** $y - \frac{7}{4}x = -2$

Example 3

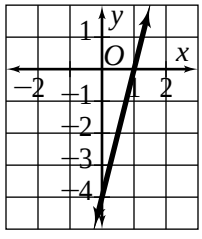
Write an equation of a line with the given slope and *y*-intercept.

25. $m = 3, b = 2$ **26.** $m = -4, b = -3$ **27.** $m = \frac{5}{3}, b = -7$ **28.** $m = -\frac{3}{7}, b = 5$

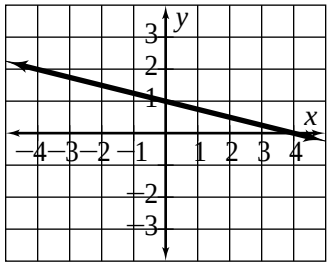
29. $m = -2, b = 0$ **30.** $m = \frac{1}{2}, b = 4$ **31.** $m = -\frac{1}{4}, b = 0$ **32.** $m = 6, b = -4$

Find the slope and *y*-intercept of each line. Write the equation of each line.

33.



34.



35.