Name _____ Class _____ Date _____

Practice 5-8

Example Exercises

Example 1

Find the slope of a line parallel to the graph of each equation.

1. $y = 3x - 8$ **2.** $y = \frac{2}{3}x + 6$ **3.** $y = -2x - 1.5$ **4.** $y = -\frac{5}{2}x + 11$

5. $9x + 3y = 6$ **6.** $y = -4$ **7.** $-8x + 6y = 4$ **8.** $0.5x - 6y = 4$

9. $x = 10$ **10.** $8x - 9y = 7$ **11.** $y = 0$ **12.** $-9x - 4y = 0$

Write an equation of a line that contains the given point and is parallel to the given line.

13. $(4, 1); y = 3x - 2$ **14.** $(2, 6); y = -2x + 5$ **15.** $(3, -4); y = 5x - 3$

16. $(8,0); y = \frac{1}{2}x + 5$ **17.** $(-5, -8); y = -\frac{3}{5}x + 2$ **18.** $(8, -5); -5x - 4y = 3$

19. $(6, -2); 3x + 2y = 8$ **20.** $(-1, 7); 6x - 3y = 9$ **21.** $(0, 1); y = \frac{3}{7}x - 8$

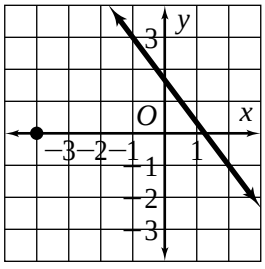
Example 2

Write an equation of a line that contains the given point and is perpendicular to the given line.

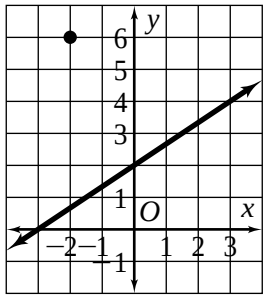
22. $(5, 1); y = 5x - 2$ **23.** $(4, 1); y = -2x + 6$ **24.** $(3, 2); y = \frac{1}{4}x + 7$

25. $(6, 5); y = -\frac{1}{2}x + 1$ **26.** $(9, -3); y = 3x + 8$ **27.** $(0, 4); y = -\frac{5}{7}x - 2$

28.



29.



30.