

Unit B Test Review

Sketch the graph of each line.

1) $x + 2y = -4$

2) $6x - y = 3$

3) $x + 5y = -10$

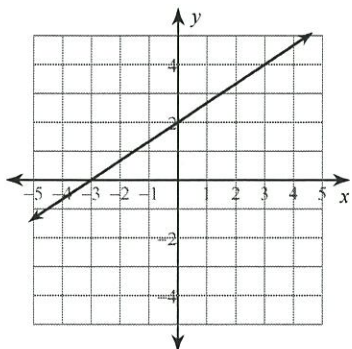
4) $y = \frac{3}{4}x$

5) $x = -4$

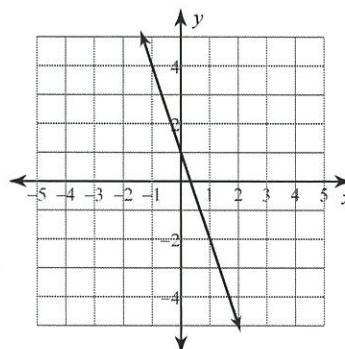
6) $y = -6x + 2$

Write the slope-intercept form of the equation of each line.

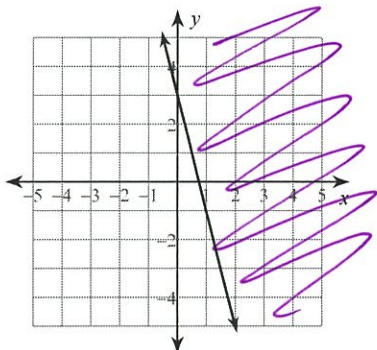
7)



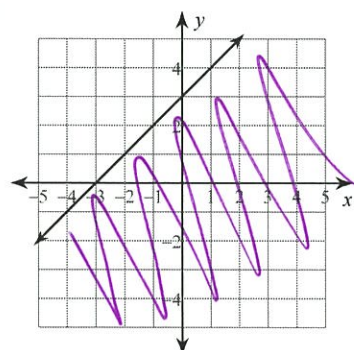
8)



9)



10)



Write the slope-intercept form of the equation of the line through the given point with the given slope.

11) through: $(-5, 3)$, slope = $-\frac{8}{5}$

12) through: $(2, 3)$, slope = 3

13) through: $(1, -3)$, slope = 2

14) through: $(-2, 3)$, slope = -4

Write the slope-intercept form of the equation of the line through the given points.

15) through: $(2, -3)$ and $(-5, -3)$

16) through: $(0, 3)$ and $(-2, 5)$

17) through: $(-2, 0)$ and $(0, 3)$

18) through: $(-4, 5)$ and $(1, -3)$

Sketch the graph of each linear inequality.

19) $y \geq \frac{1}{4}x - 3$

20) $x < 4$

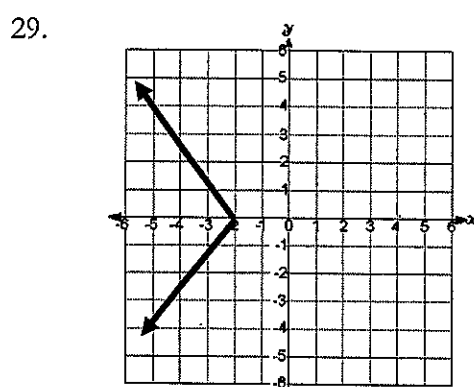
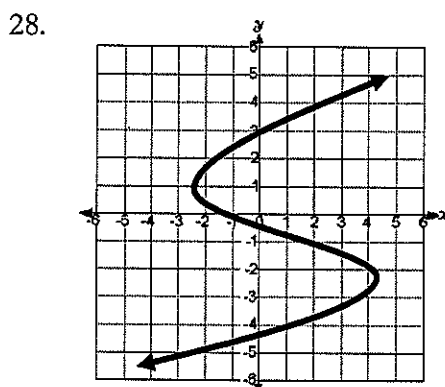
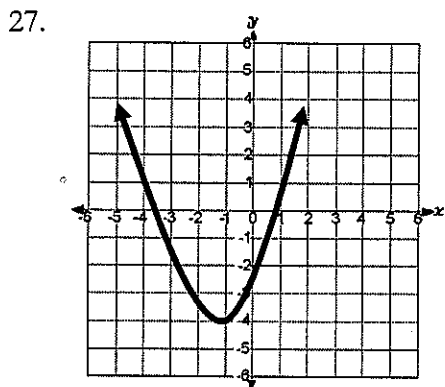
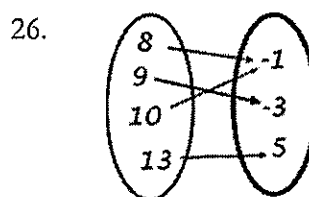
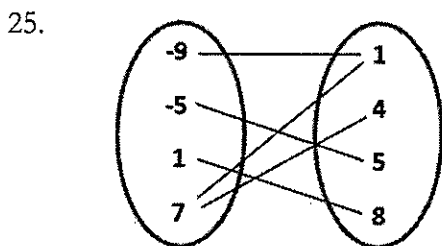
21) $y \leq -\frac{1}{5}x + 3$

22) $y \geq \frac{5}{4}x - 3$

Determine the Domain, Range, and whether each relation is a function.

23. $(-4, 3), (2, -5), (-4, 5), (1, 2)$

24. $(3, -2), (7, 8), (1, 4), (7, 8), (5, 8)$



Evaluate each function, given that $f(x) = 3x + 5$ and $g(x) = -x^2 - 3$.

30. $g(3)$

31. $f(-4)$

32. $f(5) - 8$

33. $2(g(4))$

Find the missing value, given the slope of the line that passes through the given points.

34. $(-2, -2), (-6, y); m = -\frac{7}{4}$

35. $(x, 3), (2, 0); m = \frac{3}{5}$

36. $(x, 8), (-1, 1); m = -\frac{7}{5}$

37. $(2, 9), (x, 7); m = \frac{2}{7}$