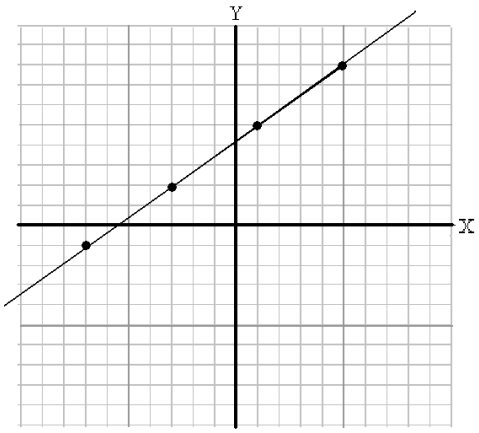
DIRECTIONS: Determine whether or not the relation is a function.

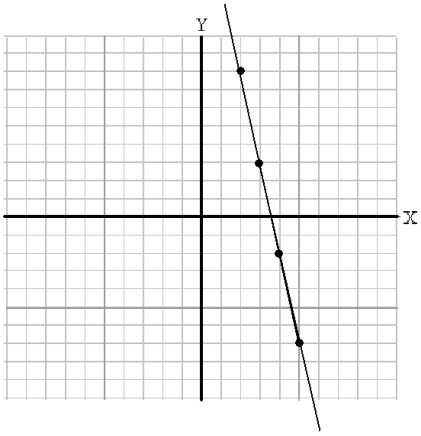
1. $(2, 0), (5, -3), (8, -3), (11, 1)$

2. $(-3, -1), (-2, 6), (-3, 4), (2, -3)$

DIRECTIONS: Determine the slopes of the lines on the graphs.



3. _____



4. _____

DIRECTIONS: Find the slopes of the lines passing through the given points. Also state whether the lines are rising, falling, horizontal, or vertical.

5. $(-3, 5), (6, 2)$

6. $\left(\frac{1}{3}, \frac{5}{4}\right), \left(\frac{4}{3}, \frac{11}{4}\right)$

DIRECTIONS: Determine whether the relationships between Line 1 & Line 2 is parallel, perpendicular, or neither.

7. Line 1: through $(0, 8)$ and $(-6, 0)$
Line 2: through $(-7, 6)$ and $(-3, 9)$

8. Line 1: through $(-8, -2)$ and $(-5,\ 4)$
Line 2: through $(0, 4)$ and $(1, 6)$

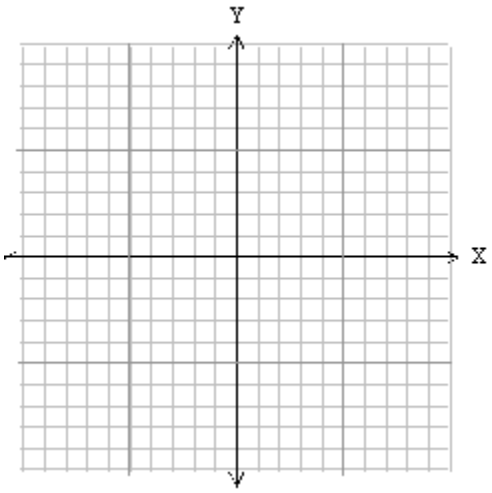
DIRECTIONS: Graph the following equations. Use a straightedge to make your lines.

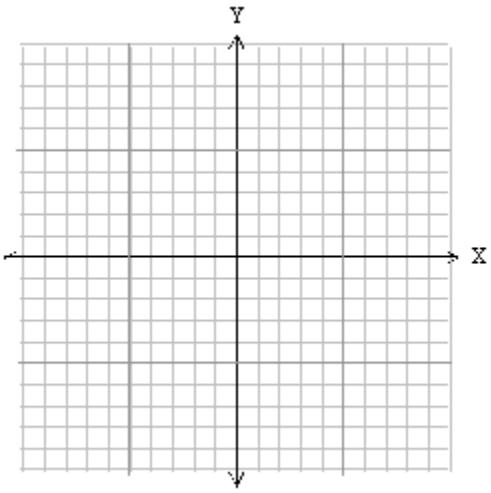
9. $y = -4x + 5$

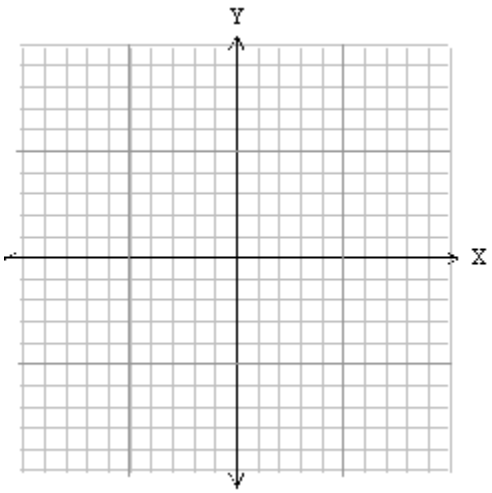
10. $y = \frac{3}{2}x - 6$

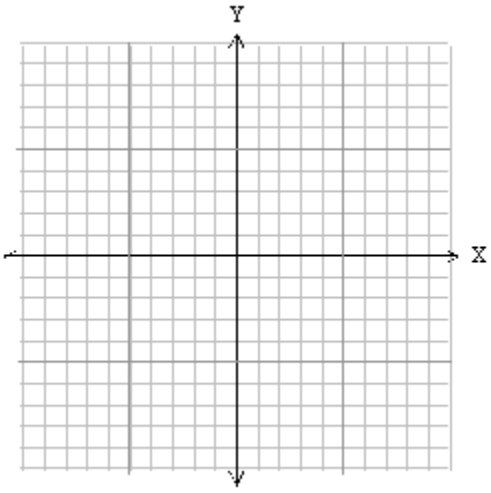
11. $4x - 3y = -12$

12. $5x + 4y - 20 = 0$









DIRECTIONS: Evaluate the functions for the given value of *x*.

13. $f(x) = x + 7;\ \ f(-5)$

14. $f(x) = |4x + 1| + 2;\ \ f(-7)$

15. $f(x) = 3x^2 + 4x - 5;\ \ f(3)$

16. $f(x) = 12;\ \ f(9)$

DIRECTIONS: Write an equation in standard form $(Ax + By = C)$ for the lines that are determined by the given information.

17. Slope is –3 and *y*-intercept is $(0, 6)$

18. Contains $(-2, 5)$ and slope is 3

19. Contains $(-4, 2)$ and $(8, -6)$

20. Contains $(5, 9)$ and $(-1, -1)$

21. Contains $(2, 4)$ and is perpendicular to the line $y = -\frac{1}{6}x + 2$

22. Contains $(-1, 3)$ and is parallel to the line $y = 2x + 4$