

Solutions for these pages are at the end of this file.

- 1) Write the slope-intercept form of lines a, b, c, and d. 2) Write the slope-intercept form of lines w, x, y, and z.

a) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$

b) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$

c) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$

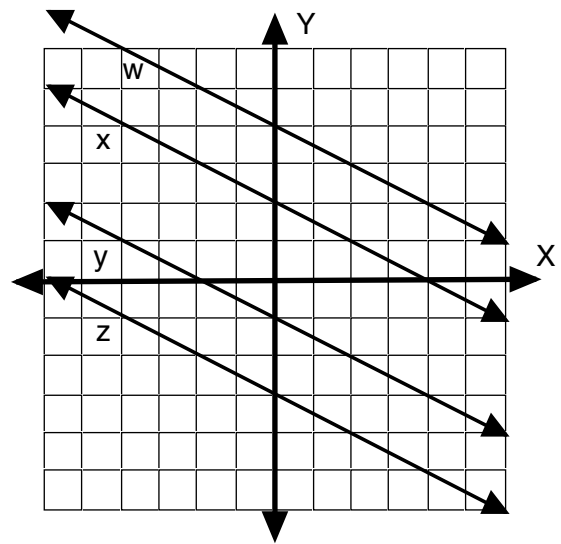
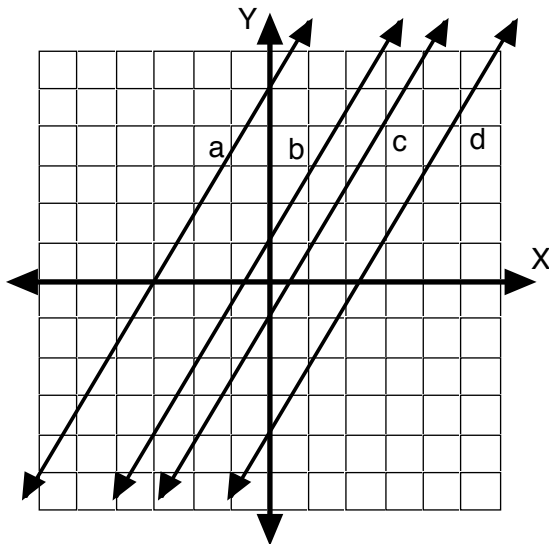
d) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$

w) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$

x) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$

y) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$

z) $m = \underline{\hspace{1cm}}$, $b = \underline{\hspace{1cm}}$, $Y = \underline{\hspace{1cm}}$



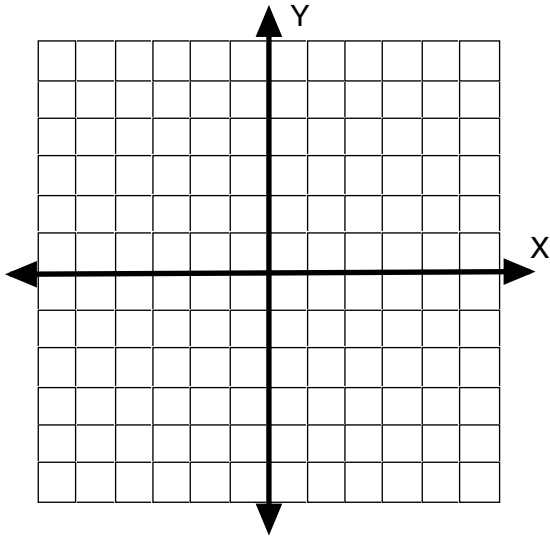
Be sure all the equations are in the slope-intercept form before comparing the slopes. There may be more than one answer for some of these questions.

- 3) Which of the following lines are parallel to $Y = -3X + 2$?
- A) $Y = 1/3 X - 2$
 B) $Y = -3X$
 C) $Y = 4 - 3X$
- 4) Which of the following lines are parallel to $Y = 1/2 X - 5$?
- A) $Y = 1/4 X + 5$
 B) $Y = -1/2 X + 2$
 C) $Y = 4 + 4/8 X$
- 5) Which of the following lines are parallel to $2Y - 3X = 4$?
- A) $Y = 2/3 X + 4$
 B) $Y = 6/4 X$
 C) $2Y = 8 - 3X$
- 6) Which of the following lines are parallel to $3Y + 4X = -6$?
- A) $Y = 12/9 X - 1$
 B) $3Y = -4X + 0$
 C) $-2Y = 5X - 8$

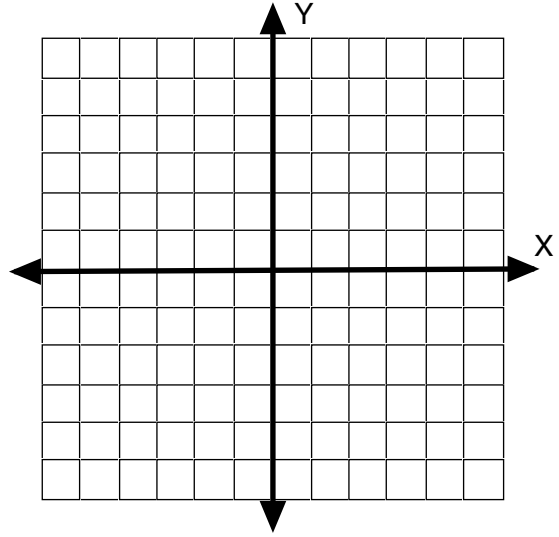
- 1) Change $-Y + 2X = 4$ to the slope-intercept form of a line.
- 2) Change $Y - 4X = 0$ to the slope-intercept form of a line.
- 3) Change $-2Y - X = -2$ to the slope-intercept form of a line.
- 4) Change $3Y - 2X = -6$ to the slope-intercept form of a line.
- 5) Change $-4Y - 3X = -8$ to the slope-intercept form of a line.
- 6) Change $Y = -\frac{5}{3}X - 2$ to the standard form of the equation of a line.
- 7) Change $Y = 4X - 3$ to the standard form of the equation of a line.
- 8) Change $Y = \frac{1}{4}X + 3$ to the standard form of the equation of a line.
- 9) Change $Y = -\frac{3}{5}X - 1$ to the standard form of the equation of a line.
- 10) Change $Y = 3X$ to the standard form of the equation of a line.

Plot the points, draw a line to connect them, and find the slope-intercept form of the line.

1) $(-4, -6), (4, 0)$ $Y =$ _____

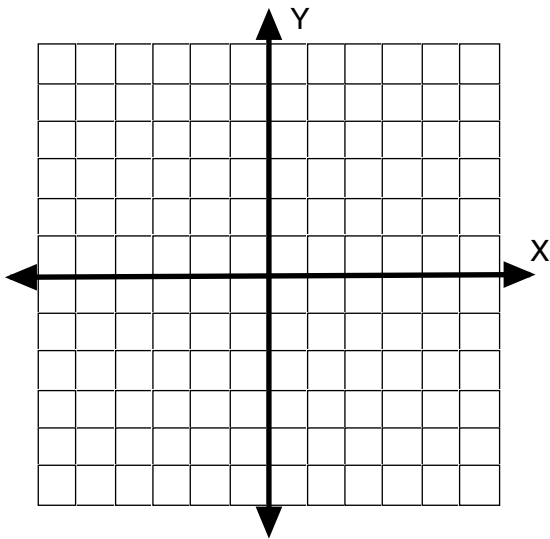


2) $(-2, 2), (1, 5)$ $Y =$ _____

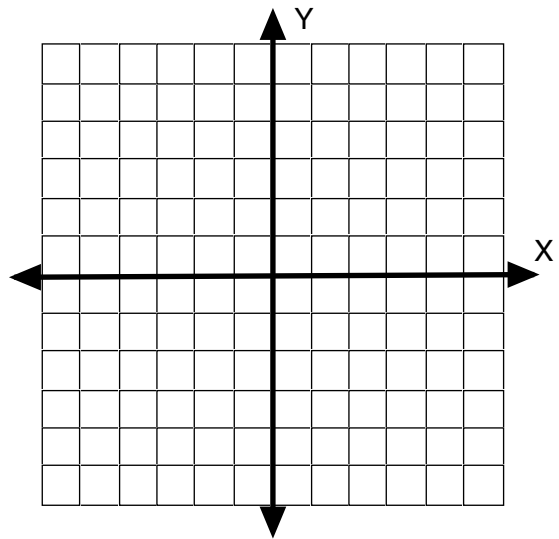


Plot the points and draw the line. Find the slope-intercept form and the standard form of the equation of the line.

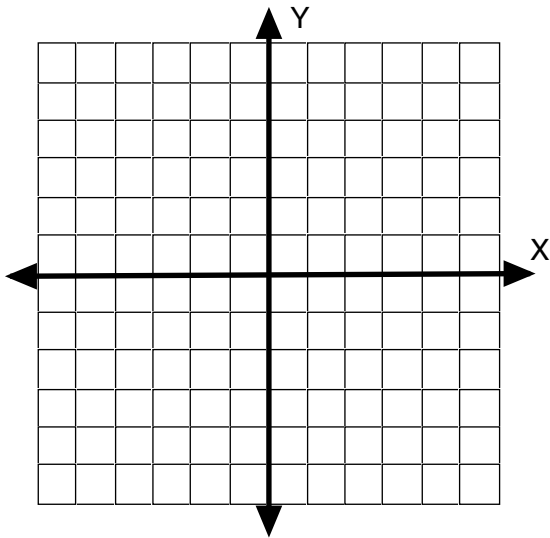
3) $(-3, -2), (4, -2)$ $Y =$ _____



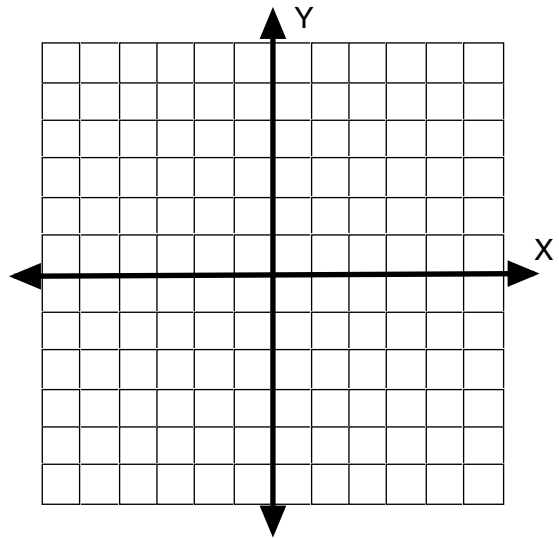
4) $(0, 2), (6, -6)$ $Y =$ _____



5) $(-3, 6), (0, 0)$ $Y =$ _____



6) $(3, 5), (3, -1)$ $X =$ _____



Lesson 8A.1

- 1) a) $m = 5/3$, $b = 5$, $Y = 5/3 X + 5$
 b) $m = 5/3$, $b = 1$, $Y = 5/3 X + 1$
 c) $m = 5/3$, $b = -1$, $Y = 5/3 X - 1$
 d) $m = 5/3$, $b = -4$, $Y = 5/3 X - 4$

- 2) w) $m = -1/2$, $b = 4$, $Y = -1/2 X + 4$
 x) $m = -1/2$, $b = 2$, $Y = -1/2 X + 2$
 y) $m = -1/2$, $b = -1$, $Y = -1/2 X - 1$
 z) $m = -1/2$, $b = -3$, $Y = -1/2 X - 3$

- 3) A) $Y = 1/3 X - 2$
 B) $Y = -3X$
 C) $Y = 4 - 3X$; $Y = -3X + 4$

Lines B and C both have a slope of -3 , which is the same slope as $Y = -3X + 2$.
Answers B and C are parallel to the given line.

- 4) A) $Y = 1/4 X + 5$
 B) $Y = -1/2 X + 2$
 C) $Y = 4 + 4/8 X$; $Y = 1/2 X + 4$

Line C has a reduced slope of $1/2$, which is the same slope as $Y = 1/2 X - 5$.
Answer C is parallel to the given line.

- 5) A) $Y = 2/3 X + 4$
 B) $Y = 6/4 X$; $Y = 3/2 X$
 C) $2Y = 8 - 3X$; $2Y = -3X + 8$, $Y = -3/2 X + 4$

Given line: $2Y - 3X = 4$; $2Y = 3X + 4$; $Y = 3/2 X + 2$
 Line B has a reduced slope of $3/2$, which is the same slope as $Y = 3/2 X + 2$.
Answer B is parallel to the given line.

- 6) A) $Y = 12/9 X - 1$; $Y = 4/3 X - 1$
 B) $3Y = -4X + 0$; $Y = -4/3 X$
 C) $-2Y = 5X - 8$; $Y = -5/2 X + 4$

Given line: $3Y + 4X = -6$; $3Y = -4X - 6$; $Y = -4/3 X - 2$
 Line B has a slope of $-4/3$, which is the same slope as $Y = -4/3 X - 2$.
Answer B is parallel to the given line.

Lesson 8A.2

1) $-Y + 2X = 4$
 $-Y = -2X + 4$
 $Y = 2X - 4$

6) $Y = -5/3 X - 2$
 $5/3 X + Y = -2$ Adding $5/3 X$ to both sides.
 $5X + 3Y = -6$ Multiplying each term by 3.

2) $Y - 4X = 0$
 $Y = 4X + 0$
 $Y = 4X$

7) $Y = 4X - 3$
 $-4X + Y = -3$ or
 $4X - Y = 3$ Multiplying each term by -1 .

3) $-2Y - X = -2$
 $-2Y = X - 2$
 $Y = -1/2 X + 1$

8) $Y = 1/4 X + 3$
 $-1/4 X + Y = 3$
 $-X + 4Y = 12$ or $X - 4Y = -12$

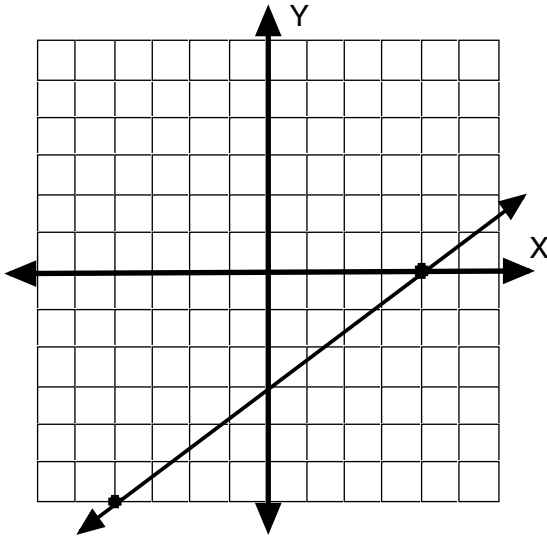
4) $3Y - 2X = -6$
 $3Y = 2X - 6$
 $Y = 2/3 X - 2$

9) $Y = -3/5 X - 1$
 $3/5 X + Y = -1$
 $3X + 5Y = -5$

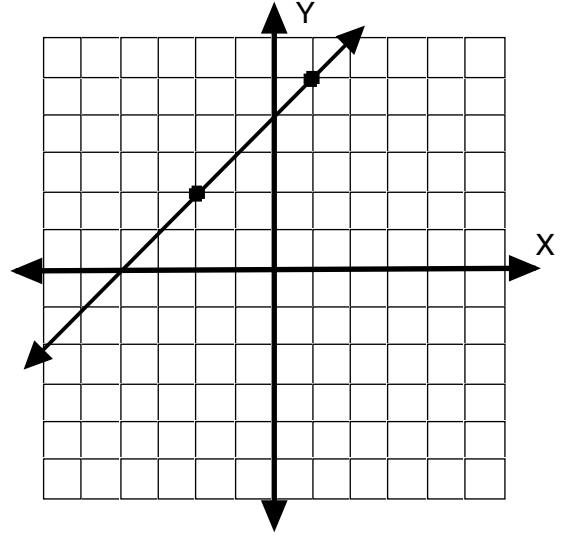
5) $-4Y - 3X = -8$
 $-4Y = 3X - 8$
 $Y = -3/4 X + 2$

10) $Y = 3X$
 $-3X + Y = 0$ or $3X - Y = 0$

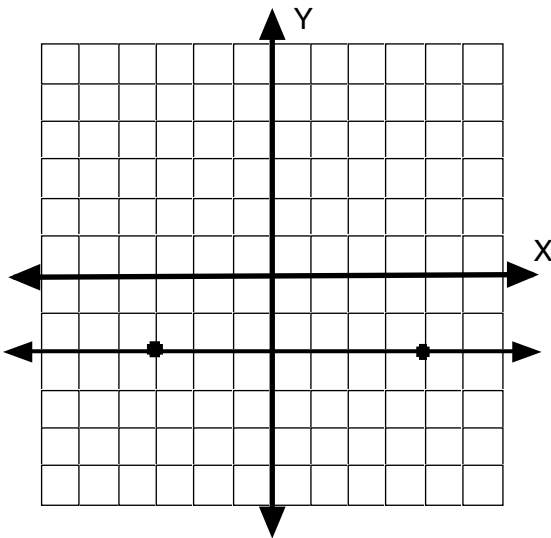
1) $Y = 6/8 X - 3$; $Y = 3/4 X - 3$



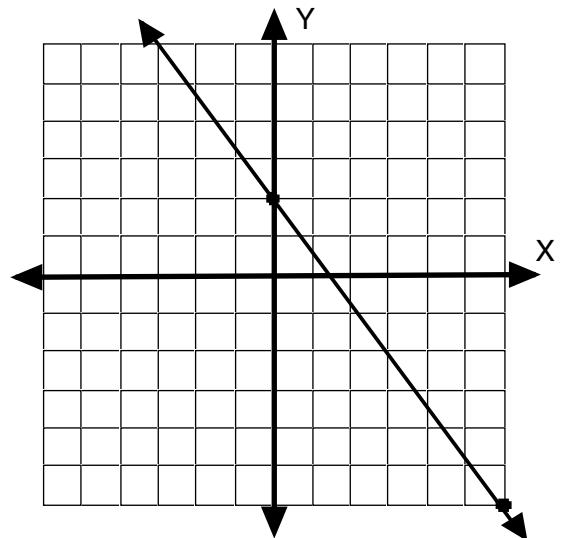
2) $Y = 3/3 X + 4$; $Y = X + 4$



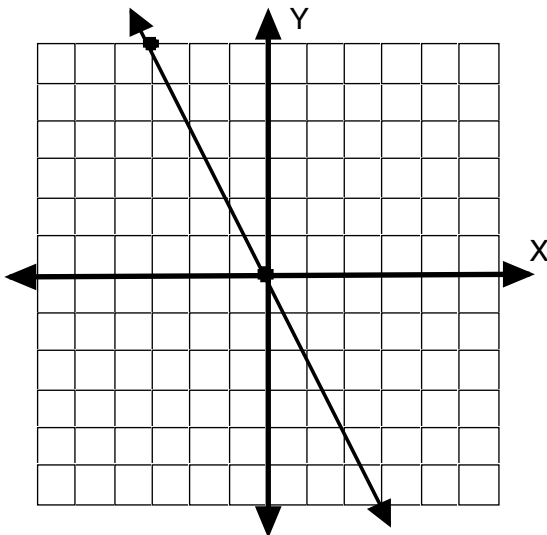
3) slope-intercept: $Y = 0X - 2$; $Y = -2$
 standard form: $Y = -2$



4) slope-intercept: $Y = -8/6 X + 2$; $Y = -4/3 X + 2$
 standard form: $4/3 X + Y = 2$; $4X + 3Y = 6$



5) slope-intercept: $Y = -6/3 X + 0$; $Y = -2X$
 standard form: $2X + Y = 0$



6) slope-intercept: none because slope is undefined and there is no Y-intercept.
 standard form: $X = 0$

