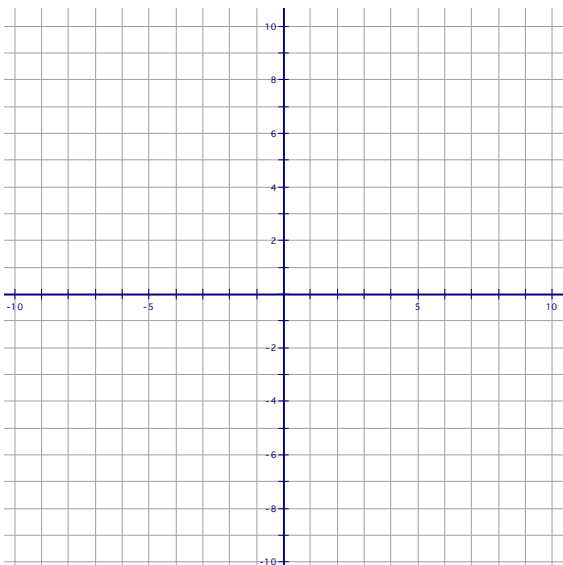


1. Graph:

x	y
-2	-3
-1	-1
0	1
1	3
2	5



Slope

What is the slope?

2. Find the slope between (0, 5) and (1, 0).

3. Find the slope between (1, 5) and (x, y).

Point-Slope Form
 $y - y_1 = m(x - x_1)$
 Example: slope=-2, point: (3, -1)

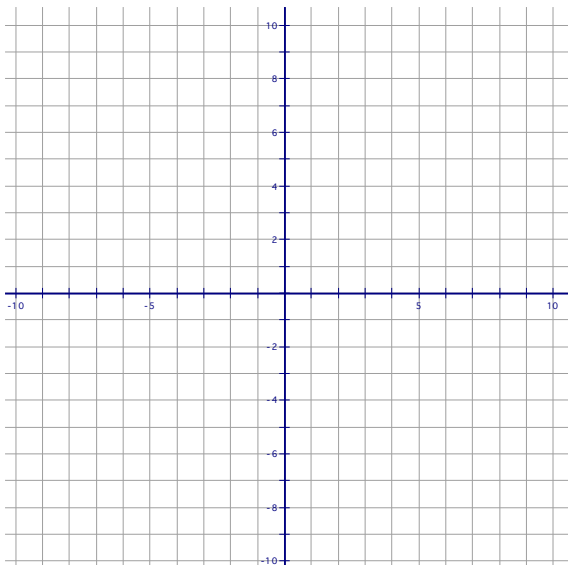
4. pg. 68 # 24

5. Write an equation of the line that goes through the points (1, 4) and (2, 1).

Find the slope:

Pick one of the points:

Write your equation:



6. The graph below shows how much the school French Club made during a fundraiser. After 3 days they made \$50. After 7 days they made \$270.

Independent Quantity (x):

Dependent Quantity (y):

Point(s):

Slope:

Equation:

How much money will they have after 15 days?

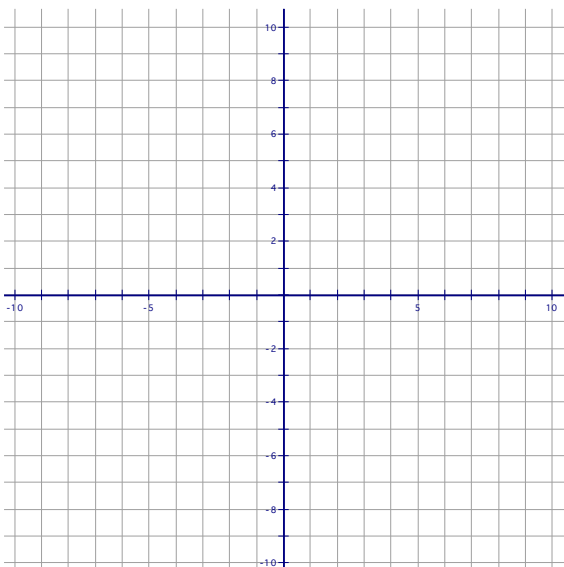
Practice:

Slope-Intercept Form
 $y = mx + b$

Example: slope=5, point: (0, -3)

7. Graph the line $y = 3x + 1$

8. Find the equations of the line in slope-intercept form through the points (0, 4) and (2, 8).



9. You already have \$10. You earn \$8 per hour. Write an equation for the amount you have after a given number of hours and graph.

Independent Quantity (x):

Dependent Quantity (y):

Slope:

y-intercept:

Equation:

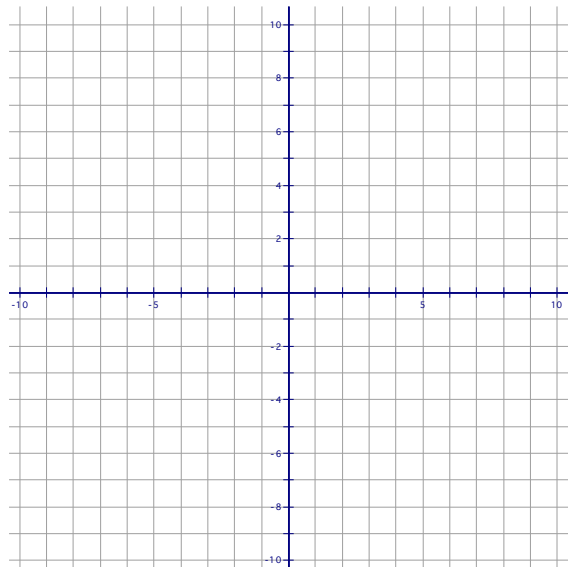
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Standard Form
 $Ax + By = C$
Example: $3x + 6y = 12$

10. Graph the line $3x - 6y = 12$.

Find the y-intercept (Hint: What is the x-coordinate of this point?):

Find the x-intercept (Hint: What is the y-coordinate of this point?):



11. It costs \$3 for every pound of apples and \$2 for every pound of oranges. You have a total of \$12 to spend. Write an equation to represent the number of apples and oranges you can buy. Then graph.

Independent Quantity (x):

Dependent Quantity (y):

x-intercept:

y-intercept:

Equation:

Graph:

Practice

12. Point Slope Form: $y + 2 = -4(x - 1)$

Slope Intercept Form: _____

Standard Form: _____

13. Point Slope Form: $y - 3 = 2(x + 5)$

Slope Intercept Form: _____

Standard Form: _____

Horizontal Lines

Vertical Lines

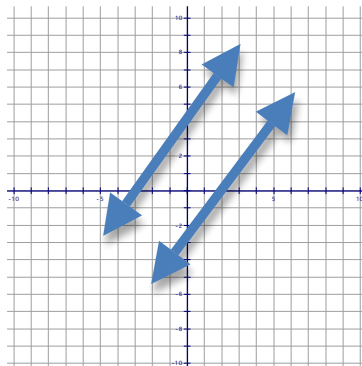
Parallel Lines

The following two lines are parallel:

$$y = (2/3)x + 4 \quad y = (2/3)x - 3$$

What is similar?

Parallel lines have the same _____!!!



Perpendicular Lines

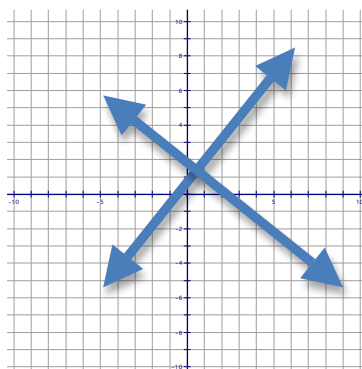
The following two lines are perpendicular:

$$y = (4/3)x \quad y = (-3/4)x + 1$$

Compare their slopes:

Perpendicular lines have slopes that are _____!!!

Their product is ____!



14. pg. 67, Quick Check #7a

15. Pg. 67, Quick Check #7b