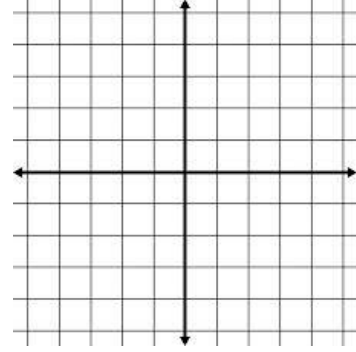


Monday:

1) Graph the data in the table.

x	-4	0	1	-3	5
y	3	1	1	3	-4

- a. Is it linear or nonlinear?
b. Is it a function? Defend your claim:



2. Solve each equation. **Check** by substituting for the variable in the original equation.

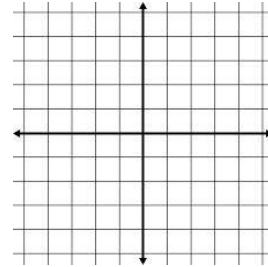
a. $-3(x - 8) = -2x + 7$ ✓

b. $\frac{x}{12} + 8 = -4$ ✓

3. Give an example of a relation that is **not** a function:

a. Mapping:

b. Graph:



4. a. $11\frac{1}{4} - 5\frac{1}{2}$

b. $1\frac{3}{4} \cdot 2\frac{1}{6}$

c. $\frac{7}{8} - \frac{11}{12}$

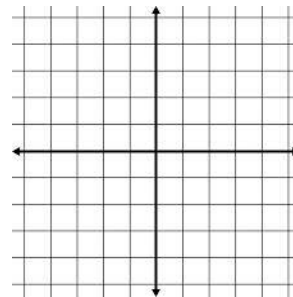
Tuesday:

1)

x	-3	0	2	-1	3
y	2	8			

Equation: _____

Graph: scale your y axis!



2. Find the slope between the 2 points:

a. (0, 0) and (-4, 5)

b. (-1, 4) and (3, -1)

c. (5, -7) and (-3, 1)

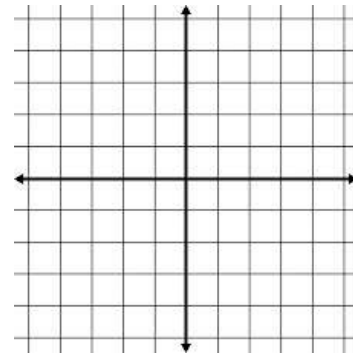
3. Graph the lines (on the same graph) using the slope and y-intercept.

a. $y = 3x - 1$ $m =$ $b =$

is the slope positive or negative? _____

b. $y = -\frac{3}{2}x + 3$ $m =$ $b =$

is the slope going uphill or downhill? _____



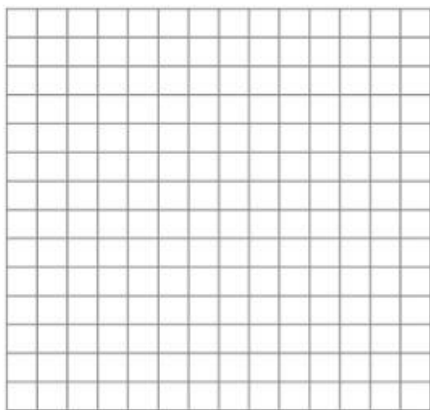
4. Write the rule for the linear function given in the table and complete the table:

x	-2	0	2	5	22
y	8		10		

Rule: _____

Wednesday:

1. You have \$180 in the bank and each week you take out \$25 for spending money
Graph using appropriate scale:



Rule: _____

Interpret the slope in the context of this problem:

Interpret the y-intercept in the context of this problem:

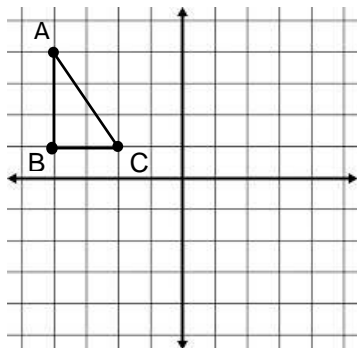
In how many weeks will you run out of cash?

2. Solve each equation. Check by substituting for the variable in the original equation.

a. $-3(x - 4) = 3x + 8$ ✓

b. $5(x + 6) = 2x + 30 + 3x$ ✓

3. Rotate the image 180° then reflect the image over the x-axis



4. Using the digits 1 to 9, at most one time each, create an equation where x is a positive value. Show that your equation has a positive solution.

$$\square X + \square = \square X - \square$$

2nd Image Coordinates:

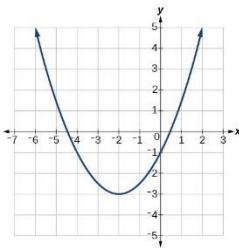
A'': (,) B'': (,) C'': (,)

5. Are the following functions linear? If it is linear, write the rule:

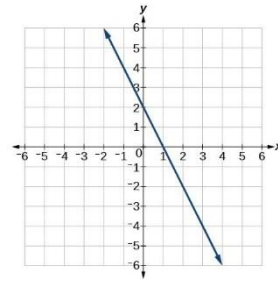
a.

x	-3	1	2	5	11
y	-3	5	7	13	25

b.



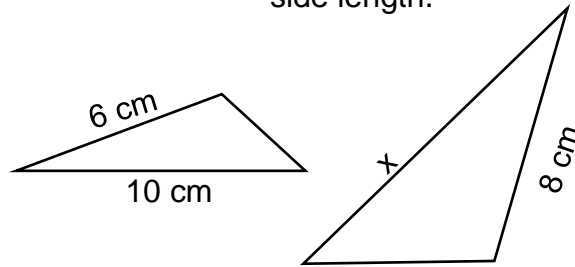
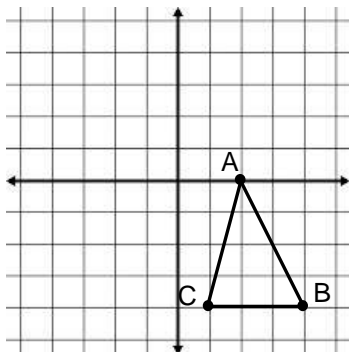
c.



Thursday:

1. Reflect the figure over the y-axis then translate the image $(x, y) \rightarrow (x + 3, y + 4)$

2. The triangles are similar. Find the missing side length.

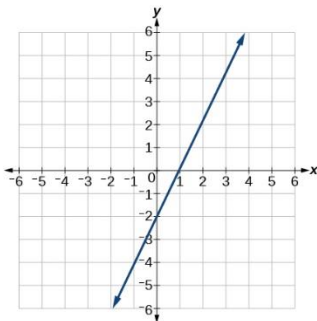


2nd Image Coordinates:

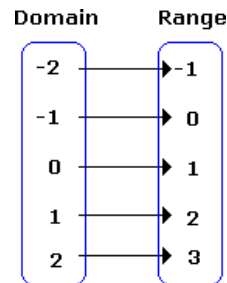
A'': (,) B'': (,) C'': (,)

3. Use the graph or mapping diagram to write a linear function that relates y to x.

a.



b.



4. Find the value of y for the given value of x:

a. $y = -4x + 2$; $x = -20$

b. $y = -65 - 21x$; $x = -2$

c. $y = -2x^2$; $x = 9$

5. Tell if the following functions are linear or nonlinear and defend your claim: (if it is linear, write the slope and y-intercept).

a. $y = 8 - 5x$

b. $y = 3x^2$

c. $y = \frac{x}{5} - 3$