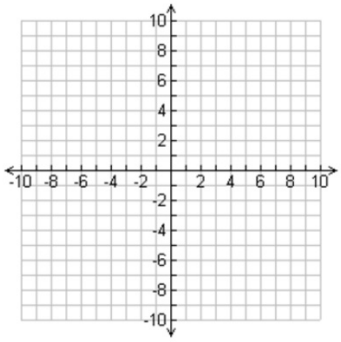
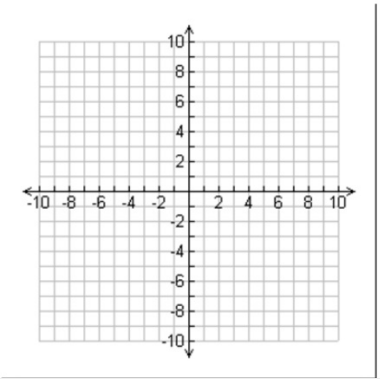
Bellwork

Plot the points and find the equation of the line that best describes the provided information:

1. (-3, 10) & (-1, -2)

2. (-3, -7) & (2, 8)





Line of Best Fit

Also known as a trend line, a line of best fit is a straight line that best represents the data on a scatter plot.

This line may pass through:

1. SOME of the points
2. NONE of the points
3. ALL of the points

Methods to finding:

1. Graphing Calculator
2. Paper and Pencil (This will be our focus!)

Finding the Line of Best Fit

Procedure:

Step 1: Graph all of the given points

Step 2: Draw a line such that...

A. It goes with the flow of the points

B. It roughly separates the points to be half above the line, and half below the line.

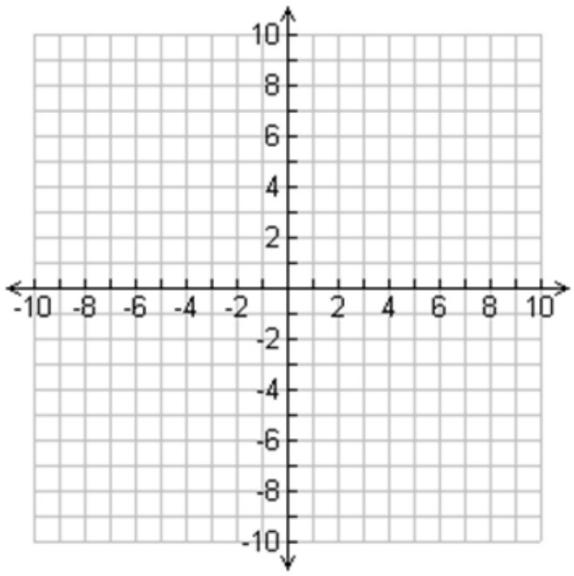
Step 3: Identify 2 points on the line you just created. (May or may not be points that you already were provided!)

Step 4: Using the two points from Step 3, find the equation of the line.

Example

A. Graph the given points.
B. Draw a Line of Best Fit (As you see it)
C. Find the equation of the line.

1. (-7, 7), (-4, 5), (-2, 1), (-1, 1), (2, -2), & (8, -6)



Example

A. Graph the given points.
B. Draw a Line of Best Fit (As you see it)
C. Find the equation of the line.

2. (-9, -9), (-5, -7), (-3, -2), (1, -1), (6, 3), & (6, 6)