## Creating the Equation of a Trend Line

You should consider the important information when drawing a trend line (line of best fit):
> Your trend line should go through two points that you already graphed on the grid.
> Your trend line should follow the trend. If the trend is positive, the line should go up from left to right. If the trend is negative, the line should go down from left to right.
> Your trend line should have about the same number of points above AND below the line.
> Your trend line should be as close to the data points as possible.
Follow these steps to create an equation for the line of best fit in Slope-Intercept form ( $\mathbf{y}=\mathbf{m x}+\mathbf{b}$ ):

STEP 1: Write down two order pairs (points) that went through your trend line: Point 1: ( , ) Point 2: ( , ) Using these two points on your trend line, find the slope. The formula to find the slope is $m=\frac{\mathbf{y}_{2}-\mathbf{y}_{1}}{\mathbf{X}_{2}-\mathbf{x}_{1}}$

STEP 2: To find the $y$-intercept. Use one of the points from step 1 and the slope to substitute these values into the $y=m x+b$ equation and solve for " $b$ ".

STEP 3: Write the equation of your trend line:

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