Vocabulary: Solving Using Trend Lines



**Vocabulary**

* Correlation – a measure of the relationship between two variables.
* If the variables tend to vary together (as one goes up, the other goes up), they are *positively correlated*.
* If the variables tend to vary in opposite directions (as one goes up, the other goes down), they are *negatively correlated*.
* If the variables are unrelated, they have *no correlation*.
* Scatter plot – a graph of (*x*, *y*) points that shows the general relationship between two variables, *x* and *y*.
	+ Generally, the variable on the horizontal (*x*) axis is the *independent variable*, and the variable on the vertical (*y*) axis is the *dependent variable*.
* Trend line – a line that fits the points in a scatter plot well.
* Another name for a trend line is a *line of best fit*.
* The slope of the trend line indicates the type of correlation the variables have.

**trend line**

* A positive slope indicates a positive correlation, a negative slope indicates a negative correlation, and a slope of zero indicates no correlation.
* For example, the trend line shown on the scatter plot to the right has a negative slope, so it suggests negative correlation between the variables.