



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.
 - 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.

