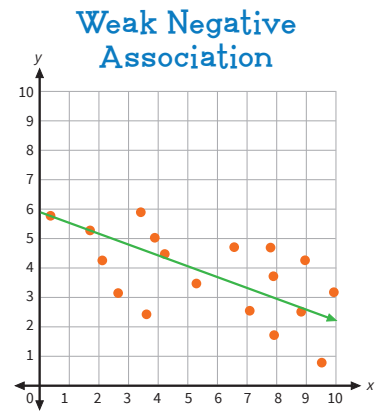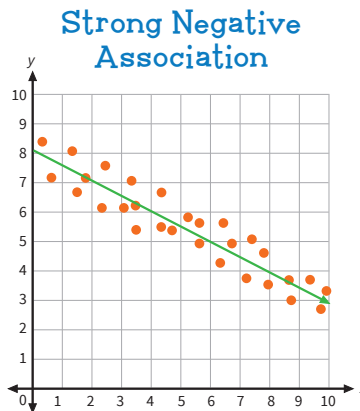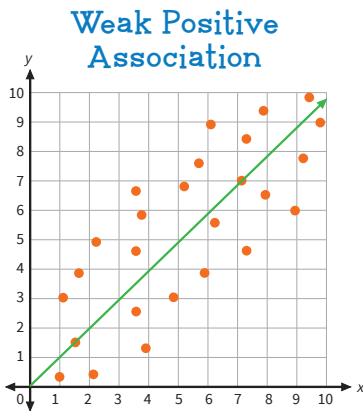# Estimating Lines of Best Fit

Scatter plots can show relationships, or **associations**, between two variables. When there is a linear association on a scatter plot, a **line of best fit** can be used to represent the data.

To estimate a line of best fit, try placing it by eye. Place the line so that it goes through as many points as possible. There should be roughly the same number of points under the line as there are above the line.
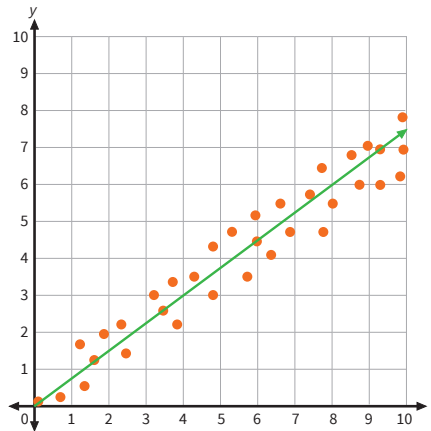
The closer the data points are to the line, the stronger the association. You can describe an association based on how strong it is and the type of slope the line of best fit has. For example, this scatter plot shows a **strong positive association**.

Here are some other scatter plots that show different types of associations:

Weak Positive Association

Strong Negative Association

Weak Negative Association

Try it yourself! Estimate the line of best fit by sketching it on each scatter plot. Then write the type of association the scatter plot shows on the line below.

_____

_____
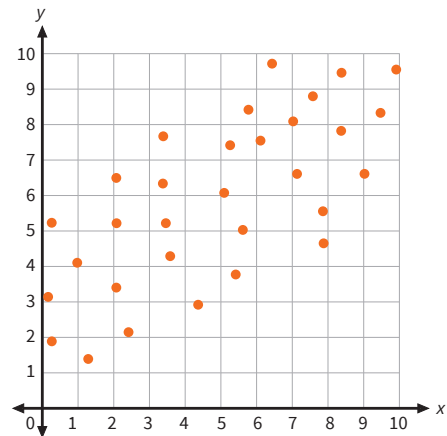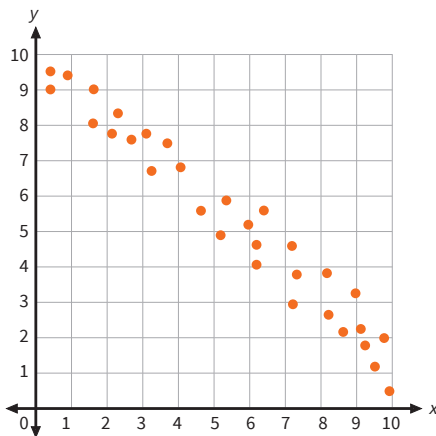
Estimating Lines of Best Fit

Keep going! Estimate the line of best fit by sketching it on each scatter plot. Then write the type of association the scatter plot shows on the line below.