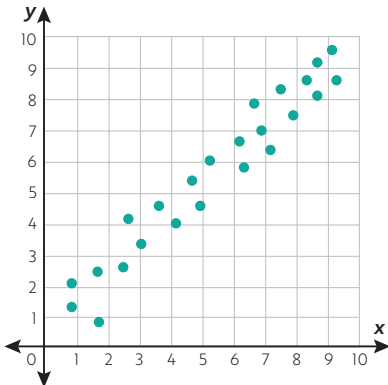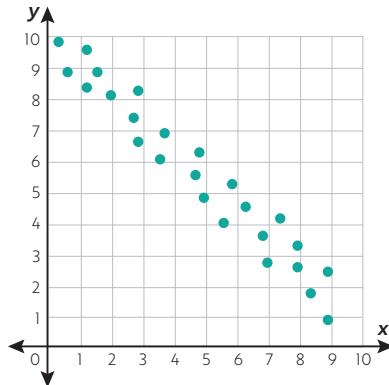# SCATTER PLOTS

A **scatter plot** is a type of graph that uses points to show values for two different variables. Scatter plots can show relationships, or **associations**, between the two variables.
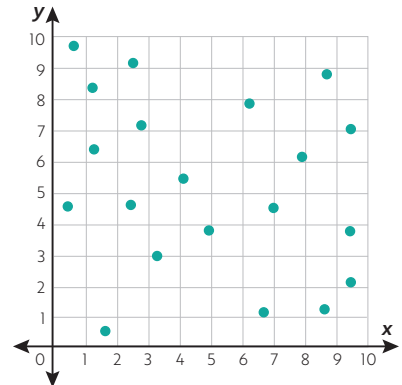
This graph shows a **positive association**. The *y*-values tend to increase as the *x*-values increase.

This graph shows a **negative association**. The *y*-values tend to decrease as the *x*-values increase.

This graph shows **no association.** There is no pattern between the *y*-values and *x*-values.

Here are some things you might see on a scatter plot:

An **outlier** is an extreme data point that is set apart from the rest of the points.

A **cluster** is a group of data points that are close together.
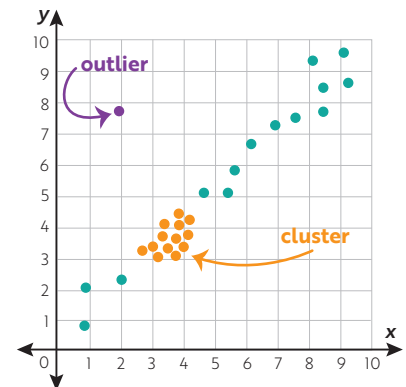
**Try it yourself!** Determine if each scatter plot has a positive association, a negative association, or no association. Write your answer on the blank. Then determine if the scatter plot has an outlier. If so, circle it.
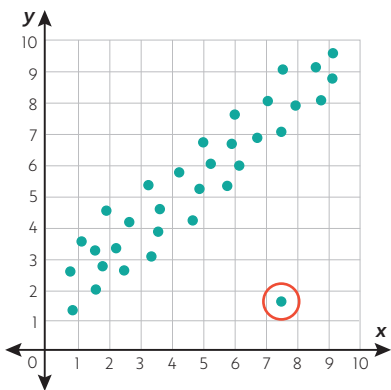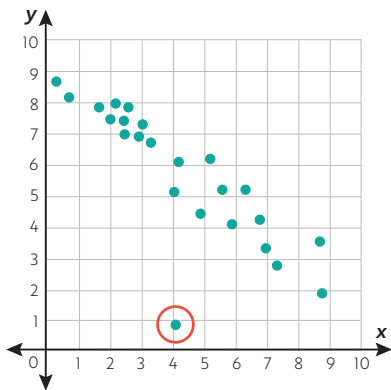
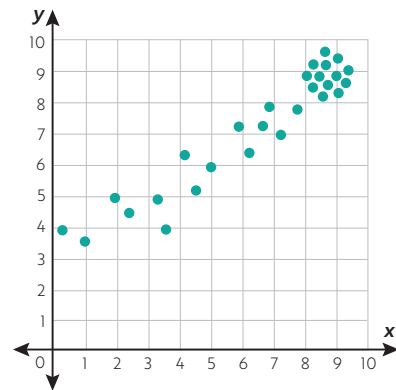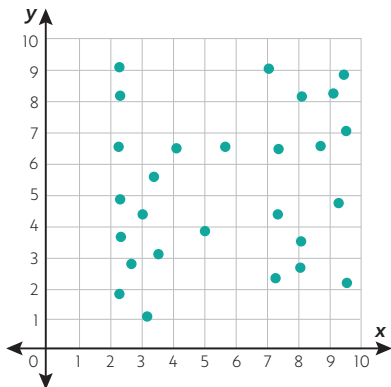_positive association_
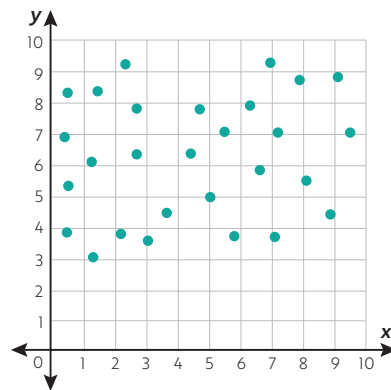
_no association_

# SCATTER PLOTS

**Keep going!** Determine if each scatter plot has a positive association, a negative association, or no association. Write your answer on the blank. Then determine if the scatter plot has an outlier. If so, circle it.
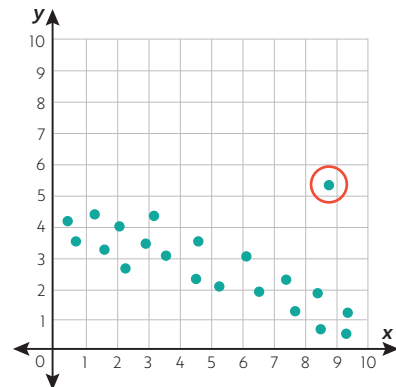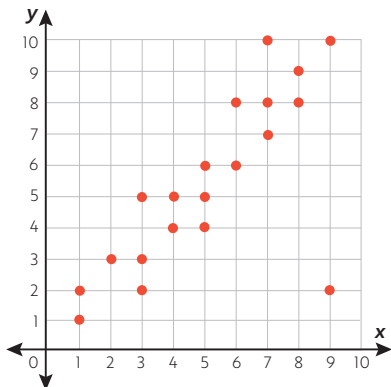


negative association



positive association



no association



negative association

**Challenge!** Create your own scatter plots based on the directions below. Scatter plots may vary.

Create a scatter plot with a positive association and an outlier at (9, 2).



Create a scatter plot with a negative association and a cluster.