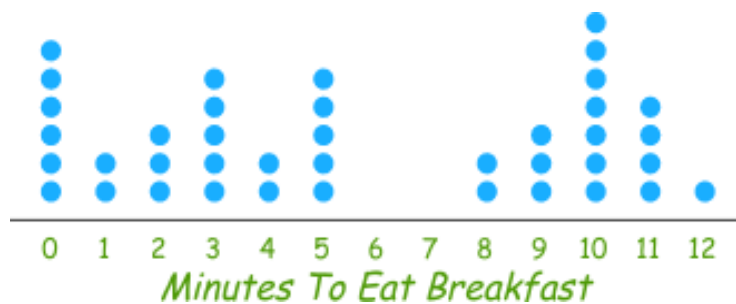# 1.3 Displaying Quantitative Data: Dotplots

You can use a bar chart or pie chart to display categorical data. A dotplot is the simplest graph for displaying quantitative data.

A **dotplot** shows each data value as a dot above its location on a number line.
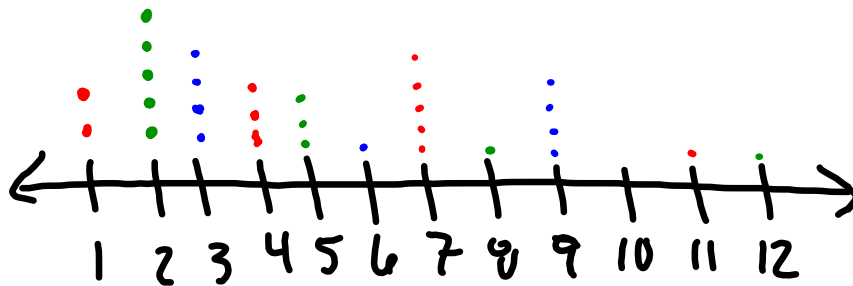
Here is an example of a dotplot:

How to Make a Dotplot

1. **Draw and label the axis.** Draw a horizontal axis and put the name of the quantitative variable underneath.

2. **Scale the axis.** Find the smallest and largest values in the data set. Start the horizontal axis at a number equal to or less than the smallest value and place tick marks at equal intervals until you equal or exceed the largest value.

3. **Plot the values.** Mark a dot above the location on the horizontal axis corresponding to each data value. Try to make all the dots the same size and space them out equally as you stack them.

Example 1: The following data shows the amount of chocolate Ms. Emily ate over the last 30 days. Create a dot plot to show how much chocolate she ate.

8, 5, 9, 2, 4, 5, 3, 8, 1, 4, 2, 9, 1, 1, 2, 2, 5, 7, 12, 6, 3, 7,
9, 2, 11, 4, 3, 9, 11

Example 2: The following data shows the amount of CD's owned by students. Create a dot plot to show how much CD's they own.

16, 22, 19, 18, 25, 18, 20, 19, 21, 17, 20, 21, 18, 17, 19, 25,
19, 20, 24, 19, 22