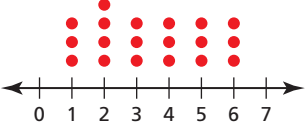
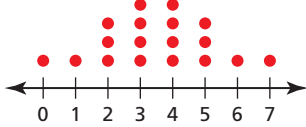
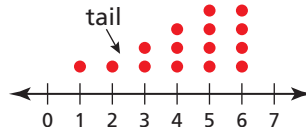


Dot Plots

The **dot plot** uses a number line to show the number of times each value in a data set occurs. Dot plots (or *line plots*) show clusters, peaks, and gaps in a data set. You can also use a dot plot to identify the shape of a distribution.

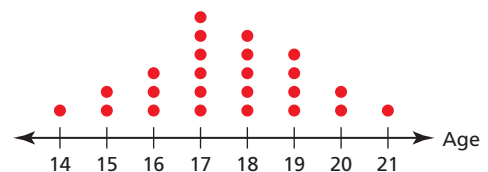
Uniform	Symmetric	Skewed
 <p>All the dots are about the same height. A uniform distribution is also symmetric.</p>	 <p>The data on the right of the distribution are approximately a mirror image of the data on the left of the distribution.</p>	 <p>The "tail" extends either left or right. A distribution is <i>skewed left</i> when most of the data are on the right and <i>skewed right</i> when most of the data are on the left.</p>

Example 1 The table shows the ages of volunteers participating in a park cleanup. Draw a dot plot that represents the data. Describe the distribution.

Ages								
19	17	18	17	18	18	20	19	
15	17	16	17	16	17	18	19	
16	18	19	20	15	17	21	14	

Draw a number line that includes the least value, 14, and the greatest value, 21. Then place a dot above the number line for each data value.

▶ A peak occurs at 17. The data on the right of the distribution are approximately a mirror image of the data on the left of the distribution. So, the distribution is symmetric.



Practice

Check your answers at BigIdeasMath.com.

Draw a dot plot that represents the data. Describe the distribution.

- Televisions in households:
2, 4, 3, 6, 2, 1, 3, 4, 0, 1, 3, 3, 2, 2, 5, 2, 1, 7, 5, 4
A peak occurs at 2. The distribution is skewed right.
- Ages of new drivers:
15, 16, 16, 17, 16, 15, 18, 16, 17, 18, 18, 15, 17, 17, 18
All the dots are the same height. The distribution is uniform.
- Heights of basketball players (in inches):
74, 79, 80, 81, 71, 73, 73, 72, 78, 79, 80, 79, 72, 73
There are two clusters of dots. Peaks occur at 73 inches and 79 inches. There is a gap between 74 inches and 78 inches. The distribution is symmetric.

