



Complete the table below. For each type of average we've encountered in the chapter, write down how to calculate it, and then give the circumstances in which you should use each one. Try your hardest to fill this out without looking back through the chapter.

Average	How to calculate	When to use it
Mean ( $\mu$ )	<p>Use either</p> $\frac{\sum x}{n}$ <p>or</p> $\frac{\sum fx}{\sum f}$ <p><math>x</math> is each value. <math>n</math> is the number of values. <math>f</math> is the frequency of each <math>x</math>.</p>	When the data is fairly symmetric and shows just the one trend.
Median	<p>Line up all the values in ascending order.</p> <p>If there are an odd number of values, the median is the one in the middle.</p> <p>If there are an even number of values, add the two middle ones together, and divide by two.</p>	When the data is skewed because of outliers.
Mode	<p>Choose the value(s) with the highest frequency.</p> <p>If the data is showing two clusters of data, report a mode for each group.</p>	<p>When you're working with categorical data.</p> <p>When the data shows two or more clusters of data.</p> <p>The only type of average you can calculate for categorical data is the mode.</p>