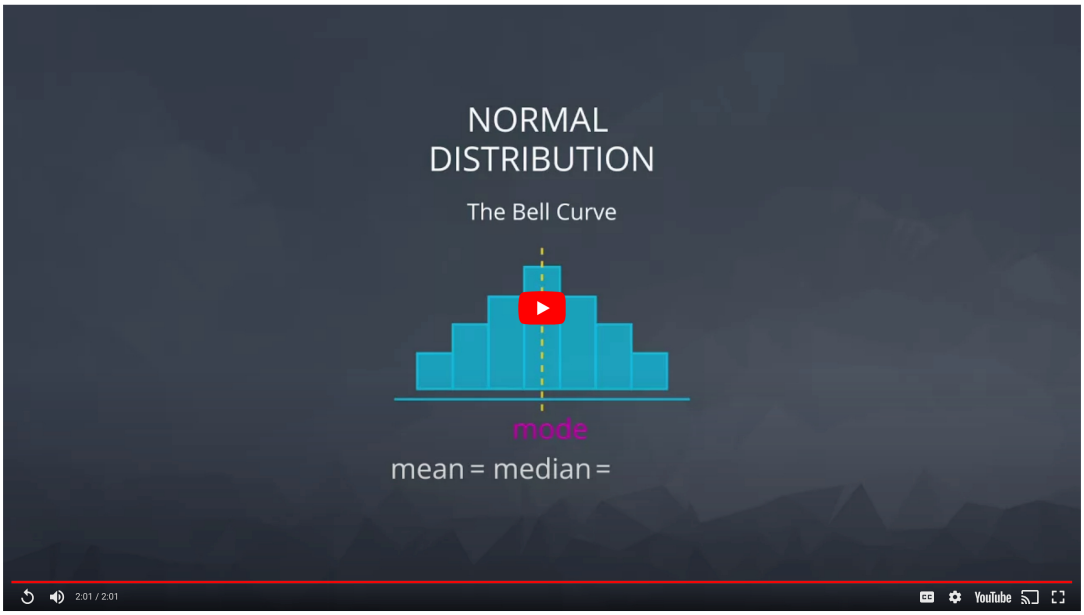
Video: Shape



Histograms

We learned how to build a **histogram** in this video, as this is the most popular visual for quantitative data.

Shape

From a histogram we can quickly identify the shape of our data, which helps influence all of the measures we learned in the previous concepts. We learned that the distribution of our data is frequently associated with one of the three **shapes**:

1. Right-skewed

2. Left-skewed

3. Symmetric (frequently normally distributed)

Summary

| **Shape** | **Mean vs. Median** | **Real World Applications** |---|---|---| | Symmetric (Normal) | Mean equals Median | Height, Weight, Errors, Precipitation | Right-skewed | Mean greater than Median | Amount of drug remaining in a blood stream, Time between phone calls at a call center, Time until light bulb dies | Left-skewed | Mean less than Median | Grades as a percentage in many universities, Age of death, Asset price changes

The mode of a distribution is essentially the tallest bar in a histogram. There may be multiple modes depending on the number of peaks in our histogram.