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Video 3 Histograms

1. The video opens by describing a study of lightning strikes in Colorado. What variable does the first histogram display?

The first graph in the video sets to show when most lightning storms start.

2. In this lightning histogram, what does the horizontal scale represent? What does the vertical scale represent?

Displayed in the first graph are time of first flash on the x axis (horizontal). On the y axis (vertical) is the percentage of days where the first flash occurs at the given times.

3. Was the overall shape of this histogram symmetric, skewed, or neither?

The overall shape of this graph was nearly symmetric with most of the first lightning strikes occurring between 11 am and 1 pm with the peak at noon.

4. Why were a few values in the second lightning histogram called outliers?

Those values are called outliers because they don't fit or follow the overall pattern of the data in the graph, causing observers to take a closer look and try to figure out why.

5. When you choose the classes for a histogram, what property must the classes have if the histogram is to be correct?

The classes must be in consistent even intervals and there must be a balance of how many there are.

6. What happens to a histogram if you use too many classes? What happens if you use too few?

If too many classes are used it may become difficult to focus on the intervals as they become too tiny. If too few classes are used the information becomes vague and general with not enough detail.