
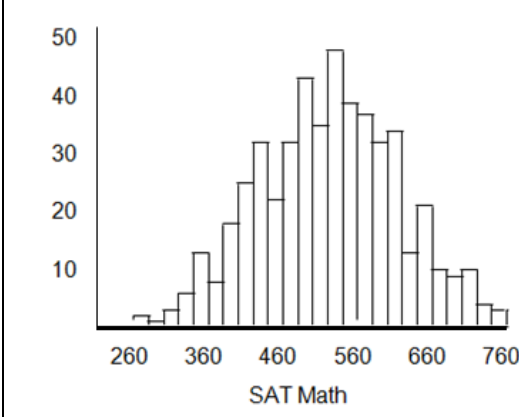
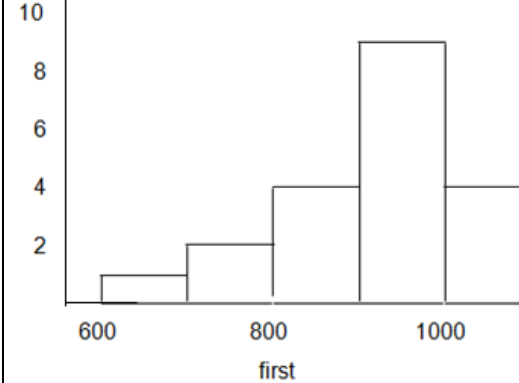


SKEWNESS

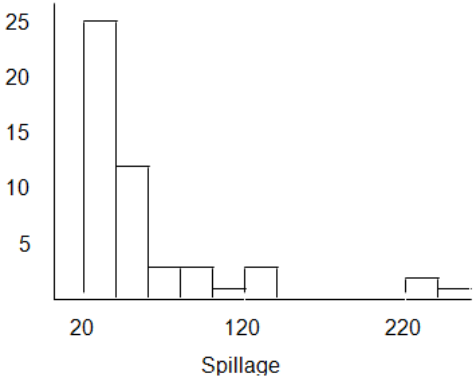
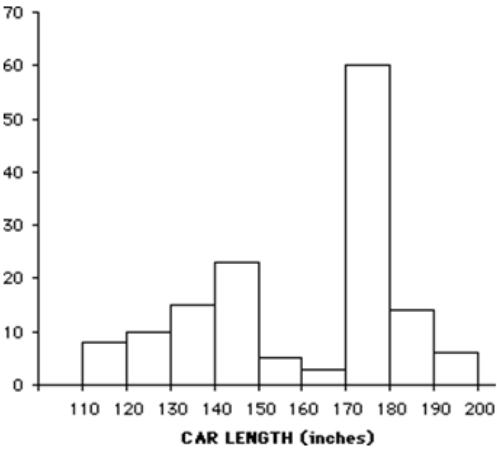
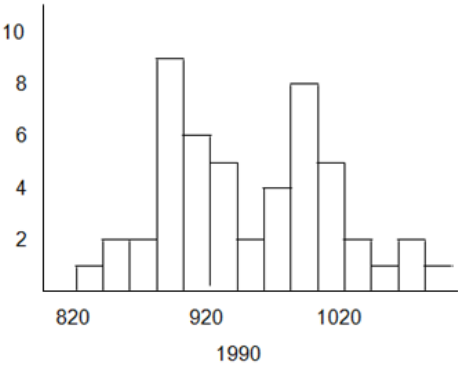
For the distributions below state:

- whether each distribution is skewed or symmetrical;
- the most appropriate measure of location and spread to calculate.

Give a reason for each choice. Suggested answers.

Distribution	Positively skewed, negatively skewed, symmetrical?	Measure of location Mean, Mode or Median?	Measure of spread Standard deviation or Interquartile range?
 <p style="text-align: center;">Shoe size of children in a class</p>	Symmetrical	Mean as distribution is symmetrical (median = mean = mode)	Standard deviation as distribution is symmetrical
 <p style="text-align: center;">SAT Math</p>	Symmetrical	Mean as above	Standard deviation as above
 <p style="text-align: center;">first</p>	Negatively skewed	Median as mean will be distorted by a few low values	Interquartile range as standard deviation will be distorted by a few low values

SKEWNESS

Distribution	Positively skewed, negatively skewed, symmetrical?	Measure of location Mean, Mode or Median?	Measure of spread Standard deviation or Interquartile range?
	Positively skewed	Median as mean will be distorted by a few very high values	Interquartile range as standard deviation will be increased by a few very high values
	Negatively skewed	Median or mode as this is not a symmetrical distribution	Interquartile range as this is not a symmetrical distribution
	Symmetrical	Mean or median These are probably equal as the distribution is symmetrical	Interquartile range as the two peaks increase the value of the standard deviation