Describe Population Distribution

Population: (Describe population with all known details)

Variable: (Give variable exactly as shown in source) **Type:** Categorical or Quantitative, Measurement Scale, Discrete or Continuous

Shape: A (boxplot; dotplot; stemplot; and histogram) (were/was) examined to determine the shape of the distribution. The (dotplot; stemplot; and histogram) (were/was) displayed using a bin width of _____ (unit of measure) increments.

All of these plots (were/was) found to be (__modal) and (nearly symmetric; highly skew right; highly skew left; slightly skew right; slightly skew left). **OR** The (boxplot; dotplot; stemplot; and histogram) appear(s) to be (__modal) and (nearly symmetric; highly skew right; highly skew left; slightly skew right; slightly skew left). However, the (boxplot; dotplot; stemplot; and histogram) appear(s) to be (__modal) and (nearly symmetric; highly skew right; highly skew left; slightly skew right; slightly skew left).

The Fisher skew statistic was ____. This statistic fell (outside the computed range of -_____ to +_____ ; inside the computed range of -_____ to +_____ ; near 0) indicating that the distribution's shape is (highly skew right; highly skew left; slightly skew right; slightly skew left; nearly symmetric).

Center: Mean = _____ (units), Median = _____ (units), Mode = _____ (units)

The best measure of central tendency is the (mean, median) because the distribution is (symmetric; skewed). This (symmetric; skew right; skew left) shape causes the mean to be (nearly equal to; greater than; less than) the median.

Spread: Range = _____ (units), IQR = _____ (units), σ = _____(units)

The best measure of spread is the (range and interquartile range; standard deviation) because the distribution is (symmetric; skewed).

Outliers: IQR Method: Adding 1.5 times the IQR to the third quartile value of ____ (units) results in an upper outlier threshold of ____ (units). Subtracting 1.5 times the IQR from the first quartile value of ____ (units) results in a lower outlier threshold of ____ (units). Examination of the data found (no; #) outliers that exceeded these thresholds, (list ALL outlier values).

Standard Deviation (σ) Method: Adding and subtracting three standard deviations from the mean of ____ (units) establishes an upper outlier threshold of _____ (units) and a lower threshold of ____ (units). Examination of the data found (no; #) outliers that exceeded these thresholds, (list ALL outlier values).

The best measure of outliers is the (IQR Method; Standard Deviation Method) because the distribution is (symmetric; skewed).

KEY: RED items should be chosen from options provided exactly as written. Note each option is separated by commas.
BLUE items require appropriate words, usually the unit of measure (eg feet, $Millions, siblings)
ORANGE lines should be filled with appropriate numbers.