

Writing A Professional Distribution Description

Population: (#1 Describe population with all known details) units = give unit of measure

Variable: (#2 Give variable exactly as shown in source) **Type:** #3 Categorical OR Quantitative

Shape: A box plot and histogram were examined to determine the shape of the distribution. The histogram was displayed using a bin width of #4 (#5 unit) increments. Visual inspection of the histogram found the distribution to be (#6 __modal).

The Fisher skew statistic was #7 _____ units. This statistic fell (#8 _____) indicating that the distribution's shape is (#9 _____).

#8 Choices: outside the computed range of - ___ to + ___ OR inside the computed range of - ___ to + ___ OR near 0.

#9 Choices: highly skew right. OR highly skew left. OR slightly skew right. OR slightly skew left. OR nearly symmetric.

Center: Mean = #10 units, Median = #11 units, Mode = #12 units

The best measure of central tendency is the (#13 _____ mean OR median) because the distribution is (#14 _____). This shape also results in the mean being (#15 _____ nearly equal to OR greater than OR less than) the median.

Spread: Range = #16 units, IQR = #17 units, σ = #18 units

The best measure of spread is the (#19 _____ range and IQR OR standard deviation) because the distribution is (#20 _____).

Outliers: IQR Method: Adding 1.5 times the IQR to the third quartile value of #21 units results in an upper outlier threshold of #22 units. Subtracting 1.5 times the IQR from the first quartile value of #23 units results in a lower outlier threshold of #24 units. Examination of the data found (#25 no OR give #) outliers that exceeded these thresholds, (#26 _____ list all outlier values OR write none).

Standard Deviation (σ) Method: Adding and subtracting three standard deviations from the mean establishes an upper outlier threshold of #27 units and a lower outlier threshold of #28 units. Examination of the data found (#29 no OR give #) outliers that exceeded these thresholds, (#30 _____ list all outlier values OR write none).

The best method for outlier determination is the (#31 _____ IQR Method OR Standard Deviation Method) because the distribution is (#32 _____).