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Exploring Data

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| **Across**  **1.** The difference between the first and third quartiles  **4.** Shape where the longer tail stretches to the left  **7.** Value more than 1.5 times the IQR below Q1 or above Q3  **8.** Variable that describes data using words or numerals as labels  **9.** Tells how many standard deviations a value is from the mean  **15.** Variable that describes data using numbers as numerical values  **17.** a value that summarizes the entire distribution with a single number, a "typical" value  **20.** Difference between the maximum and minimum value  **21.** Found by summing all the data values and dividing by the count  **23.** Minimum, 1st quartile, Median, 3rd quartile, Maximum  **25.** Shape where the longer tail stretches to the right  **27.** Uses adjacent bars to show the distribution of values in a quantitative variable, where each bar represents the number of values falling in an interval  **30.** Reveals single vs. multiple modes and symmetric vs. skewness  **31.** Type of display that shows quantitative data values in a way that shows the shape of the distribution in addition to individual data values  **36.** Distribution of a variable when considering only a smaller group of individuals  **37.** In a Normal Model, about 68% of the values fall within 1 standard deviation of the mean, about 95% within 2 standard deviations, and about 99.7% within 3 standard deviations  **39.** In a two-way table, the distribution of either variable alone  **40.** The value with a quarter of the data above it | **Down**  **2.** The number that falls above a given % of the data  **3.** Displays the 5-number summary as a central box with the whiskers that extend to the non-outlying data values  **5.** Type of Normal model with mean 0 and standard deviation 1  **6.** Distribution with two modes  **10.** The value with a quarter of the data below it  **11.** The square root of the variance  **12.** Table that lists the categories of a variable and gives the proportion of observations for each category  **13.** The value found by subtracting the mean and dividing by the standard deviation  **14.** Shows bars divided proportionally into segments corresponding to the percentage in each group  **16.** Shows how a "whole" divides into categories by showing a wedge of a circle whose area corresponds to the proportion in each category  **18.** The possible values of the variable and the relative frequency of each value  **19.** The middle value of a distribution with half the data above and half below it  **22.** Distributions with more than two modes  **24.** A distribution roughly flat in shape  **26.** Numerical attribute of a population  **28.** Shape where the two halves on either side of the center look approximately like mirror images of each other  **29.** Having one mode  **32.** Graphs a dot for each case against a single axis  **33.** Shows a bar representing the count of each category in a categorical variable  **34.** Numerical attribute of a set of data  **35.** A numerical summary of how tightly the values are clustered around the "center"  **38.** When a distribution is not symmetric and one tail stretches out farther than the other |