

AP Psychology Stats Worksheet

Name: _____

Hour: _____

- Calculate mean, median, and mode for each set of data.
 - IQ's: 78, 79, 87, 88, 101, 120, 132
 - AP Psych test scores: 2, 3, 3, 3, 3, 4, 4, 4, 5, 5
 - ACT test scores: 20, 22, 23, 25, 26, 26, 32
- During the past month, Henri and Sylvia each ate 10 candy bars, while Jerry ate 8, Tricia ate 6, and Tahli ate only 1. The mean number of candy bars eaten by these individuals was:
 - 1
 - 5
 - 7
 - 8
 - 10
- In any distribution of scores, an equal number of scores are both greater than and less than:
 - the mode.
 - the mean.
 - the median.
 - all of the above
- Mr. and Mrs. Berry have five children aged 2, 3, 7, 9, and 9. The median age of the Berry children is:
 - 3
 - 6
 - 7
 - 8
 - 9
- In a distribution of test scores, which measure of central tendency would likely be the most affected by a couple of extremely high scores (outliers)?
 - median
 - range
 - mode
 - standard deviation
 - mean
- Seven members of a girls' club reported the following individual earnings from their sale of raffle tickets: \$7, \$13, \$3, \$5, \$2, \$9, and \$3. In this distribution of individual earnings, the mean is _____ the mode and _____ the median.
 - equal to; equal to
 - greater than; greater than
 - equal to; less than
 - greater than; equal to
 - less than; less than
- For which of the following distributions of scores would the median most clearly be a more appropriate measure of central tendency than the mean?
 - 16, 28, 4, 8, 24
 - 9, 6, 9, 12, 9
 - 8, 9, 12, 10, 16
 - 6, 18, 4, 5, 2
 - 3, 4, 3, 4, 2
- Variation is to central tendency as _____ is to _____.
 - range; median
 - frequency distribution; percentile rank
 - mode; mean
 - scatterplot; bar graph
 - correlation; scatterplot
- Which of the following provides a rough indication of the degree of variation among a set of scores?
 - correlation coefficient
 - scatterplot
 - range
 - median
 - percentile rank

10. The IQ scores of the five member of the Duluth family are 100, 82, 104, 96, and 118. For this distribution of scores, the range is:
- a. 6
 - b. 14
 - c. 36
 - d. 48
 - e. 10
11. Ms. Costas owns a business with nine other employees. Ms. Costa's annual salary is \$90,000. Her manager's salary is \$60,000. Of her other employees, three earn \$25,000 each and five earn \$15,000 each. The range of this distribution is
- a. \$75,000
 - b. \$50,000
 - c. \$25,000
 - d. \$20,000
 - e. \$15,000
12. In a normal distribution of scores, approximately what percentage of all scores will occur within one standard deviation from the mean?
- a. 34
 - b. 68
 - c. 95
 - d. 97.5
 - e. 100
13. The correlation between two observed variables is -0.84 . From this, it can be concluded that
- a. as one variable increases, the other is likely to increase, showing a direct relationship
 - b. as one variable increases, the other is likely to decrease, showing an inverse relationship
 - c. the two variables are unrelated
 - d. one variable causes the other variable to occur
 - e. one variable causes the other variable not to occur
14. You scored a 24 on your ACT math test. The mean for this exam is 21, with a standard deviation of 3. On the math SAT, the mean is 500 with a standard deviation of 50. If you had taken the SAT, what would your score have been?
- a. 450
 - b. 503
 - c. 550
 - d. 650
 - e. 5
15. Suppose a study finds there is only a small correlation between IQ and the ability to solve word problems in math. The correlation shows that there is a VERY weak relationship demonstrating that the higher the IQ, the better the ability to solve word problems. A correlation that would demonstrate such a relationship could be
- a. .00
 - b. +.99
 - c. +.10
 - d. -.98
 - e. -.56

Compute Standard Deviation: (Both have mean of 50)

Data set 1 scores	Deviation from mean	Data set 2 scores	Deviation from mean
44		2	
45		3	
47		5	
48		7	
49		9	
51		17	
52		48	
53		49	
55		137	
56		223	
Sum of Deviations =		Sum of Deviations =	
Standard Deviation =		Standard Deviation =	