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1. Calculate mean, median, and mode for each set of data.
a. IQ's: $78,79,87,88,101,120,132$
b. AP Psych test scores: 2, 3, 3, 3, 3, 4, 4, 4, 5, 5
c. ACT test scores: $20,22,23,25,26,26,32$
2. 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:
a. 1
b. 5
c. 7
d. 8
e. 10
3. Mr. and Mrs. Berry have five children aged 2, 3, 7, 9, and 9. The median age of the Berry children is:
a. 3
b. 6
c. 7
d. 8
e. 9
4. 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)?
a. median
d. standard deviation
b. range
e. mean
c. mode
5. Which of the following provides a rough indication of the degree of variation among a set of scores?
a. correlation coefficient
d. median
b. scatterplot
e. percentile rank
c. range
6. 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
7. 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
8. 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
9. 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
10. Suppose a study finds there is only a small correlation between $I Q$ 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
d. -.98
b. +.99
e. -. 5
c. +.10
