* **Question 1**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The mean of a sample |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  is computed by summing all the data values and dividing the sum by the number of items. | | Answers: | a.  is computed by summing all the data values and dividing the sum by the number of items. | |  | b.  is always equal to the mean of the population. | |  | c.  is computed by summing the data values and dividing the sum by *(n - 1).* | |  | d.  is always smaller than the mean of the population. | |  |  |  |

* **Question 2**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | ​The most frequently occurring value of a data set is called the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  ​mode. | | Answers: | a.  ​mode. | |  | b.  ​mean. | |  | c.  ​outlier. | |  | d.  ​median. | |  |  |  |

* **Question 3**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of the following symbols represents the size of the sample? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  *n* | | Answers: | a.  *σ* | |  | b.  *N* | |  | c.  *n* | |  | d.  *σ2* | |  |  |  |

* **Question 4**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which difficulty of range as a measure of variability is overcome by interquartile range? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  The range is influenced too much by extreme values | | Answers: | a.  The range is negative | |  | b.  The sum of the range variances is zero | |  | c.  The range is difficult to compute | |  | d.  The range is influenced too much by extreme values | |  |  |  |

* **Question 5**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | From a population of size 500, a random sample of 50 items is selected. The mode of the sample |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  must be equal to the mode of population, if the sample is ***truly random.*** | | Answers: | a.  must be equal to the mean of the population, if the sample is ***truly random.*** | |  | b.  must be equal to the mode of population, if the sample is ***truly random.*** | |  | c.  can be larger, smaller or equal to the mode of the population. | |  | d.  must be 500. | |  |  |  |

* **Question 6**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In a five number summary, which of the following is **not** used for data summarization? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  The mean | | Answers: | a.  The 25th percentile | |  | b.  The smallest value | |  | c.  The mean | |  | d.  The largest value | |  |  |  |

* **Question 7**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The mean of the sample |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  can never be negative. | | Answers: | a.  is always smaller than the mean of the population from which the sample was taken. | |  | b.  can never be zero. | |  | c.  can never be negative. | |  | d.  can assume any value between the highest and the lowest value in the sample. | |  |  |  |

* **Question 8**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The variance of a sample of 169 observations equals 576. The standard deviation of the sample equals |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  24. | | Answers: | a.  576. | |  | b.  13. | |  | c.  28,561. | |  | d.  24. | |  |  |  |

* **Question 9**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | A group of students had dinner at a local restaurant. The total bill for the dinner was $414.70. Each student paid his/her equal share of the bill, which was $18.85. How many student’s were at the dinner? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  22 | | Answers: | a.  415 | |  | b.  22 | |  | c.  4 | |  | d.  19 | |  |  |  |

* **Question 10**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The first quartile |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  is the same as the 25th percentile. | | Answers: | a.  is the same as the 25th percentile. | |  | b.  contains at least one third of the data elements. | |  | c.  is the same as the 50th percentile. | |  | d.  is the same as the 75th percentile. | |  |  |  |

* **Question 11**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | ​In computing descriptive statistics for grouped data, the data values in each class are approximated using the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  ​class range. | | Answers: | a.  ​class midpoint. | |  | b.  ​class lower limits. | |  | c.  ​class upper limits. | |  | d.  ​class range. | |  |  |  |

* **Question 12**

0.5 out of 0.5 points

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| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The following is the frequency distribution for the speed of a sample of automobiles traveling on an interstate highway.   |  |  | | --- | --- | | Speed (mph) | Frequency | | 50 - 54 | 2 | | 55 - 59 | 4 | | 60 - 64 | 5 | | 65 - 69 | 10 | | 70 - 74 | 9 | | 75 - 79 | 5 | |  | 35 |   The standard deviation is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  7.071. | | Answers: | a.  7.071. | |  | b.  6.969. | |  | c.  50.000. | |  | d.  48.570. | |  |  |  |

* **Question 13**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | When *n*-1 is used in the denominator to compute variance, |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  the data set is a sample. | | Answers: | a.  the data set is a population. | |  | b.  the data set is from a census. | |  | c.  the data set is a sample. | |  | d.  the data set could be either a sample or a population. | |  |  |  |

* **Question 14**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of the following is not a measure of central location? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  Variance | | Answers: | a.  Mode | |  | b.  Variance | |  | c.  Mean | |  | d.  Median | |  |  |  |

* **Question 15**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | ​From a population of size 1,000, a random sample of 100 items is selected. The mean of the sample |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  ​must be equal to the mean of the population, if the sample is ***truly random.*** | | Answers: | a.  ​must be equal to the mean of the population, if the sample is ***truly random.*** | |  | b.  ​can be larger, smaller or equal to the mean of the population. | |  | c.  ​must be 10 times smaller than the mean of the population. | |  | d.  ​must be 10 times larger than the mean of the population. | |  |  |  |

* **Question 16**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The geometric mean of five observations is the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  fifth root of the product of the 5 observations. | | Answers: | a.  same as their mean. | |  | b.  square root of the product of the 5 observations. | |  | c.  same as their weighted mean. | |  | d.  fifth root of the product of the 5 observations. | |  |  |  |

* **Question 17**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The nth root of the product of the n observations is the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  geometric mean. | | Answers: | a.  product variance. | |  | b.  geometric mean. | |  | c.  weighted mean. | |  | d.  product deviation. | |  |  |  |

* **Question 18**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The median of a sample will always equal the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  50th percentile. | | Answers: | a.  *(Q1 + Q3)/*2. | |  | b.  *Q4*/2. | |  | c.  50th percentile. | |  | d.  (smallest value + largest value)/2. | |  |  |  |

* **Question 19**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The closing stock price of MNM Corporation for the last 7 trading days is shown below.   |  |  | | --- | --- | | Day | Stock Price | | 1 | 84 | | 2 | 87 | | 3 | 84 | | 4 | 88 | | 5 | 85 | | 6 | 90 | | 7 | 91 |   ​  The median is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  87. | | Answers: | a.  86. | |  | b.  87. | |  | c.  84. | |  | d.  85. | |  |  |  |

* **Question 20**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The interquartile range is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  the difference between the third quartile and the first quartile. | | Answers: | a.  another name for the variance. | |  | b.  the difference between the third quartile and the first quartile. | |  | c.  the difference between the largest and smallest values. | |  | d.  the 50th percentile. | |  |  |  |

* **Question 21**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | ​Generally, which one of the following is the least appropriate measure of central tendency for a data set that contains outliers? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  ​Median | | Answers: | a.  Mean | |  | b.  ​50th percentile | |  | c.  ​Median | |  | d.  ​2nd quartile | |  |  |  |

* **Question 22**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The coefficient of variation is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  the standard deviation divided by the mean times 100. | | Answers: | a.  the mean divided by the standard deviation. | |  | b.  the same as the variance. | |  | c.  the square of the standard deviation. | |  | d.  the standard deviation divided by the mean times 100. | |  |  |  |

* **Question 23**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | ​A box plot is a graphical representation of data that is based on |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  ​a five number summary. | | Answers: | a.  ​a five number summary. | |  | b.  ​z-scores. | |  | c.  ​a histogram. | |  | d.  ​the empirical rule. | |  |  |  |

* **Question 24**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The value which has half of the observations above it and half the observations below it is called the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  median. | | Answers: | a.  median. | |  | b.  range. | |  | c.  mode. | |  | d.  mean. | |  |  |  |

* **Question 25**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Since the median is the middle value of a data set it |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  none of these alternatives is correct. | | Answers: | a.  must always be smaller than the mode. | |  | b.  must always be larger than the mode. | |  | c.  must always be smaller than the mean. | |  | d.  none of these alternatives is correct. | |  |  |  |

* **Question 26**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The variance can never be |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  smaller than the standard deviation. | | Answers: | a.  smaller than the standard deviation. | |  | b.  larger than the standard deviation. | |  | c.  negative. | |  | d.  zero. | |  |  |  |

* **Question 27**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The symbol *σ* *2* is used to represent |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  the variance of the population. | | Answers: | a.  the standard deviation of the sample. | |  | b.  the variance of the population. | |  | c.  the variance of the sample. | |  | d.  the standard deviation of the population. | |  |  |  |

* **Question 28**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The numerical value of the standard deviation can never be |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  larger than the variance. | | Answers: | a.  larger than the variance. | |  | b.  zero. | |  | c.  smaller than the variance. | |  | d.  negative. | |  |  |  |

* **Question 29**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The coefficient of correlation |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  can be larger than 1. | | Answers: | a.  can be larger than 1. | |  | b.  cannot be larger than 1. | |  | c.  is the same as the coefficient of determination. | |  | d.  cannot be negative. | |  |  |  |

* **Question 30**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The measure of location which is the most likely to be influenced by extreme values in the data set is the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  mean. | | Answers: | a.  mean. | |  | b.  mode. | |  | c.  median. | |  | d.  range. | |  |  |  |

* **Question 31**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The geometric mean of 1, 1, 8 is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  2.0. | | Answers: | a.  2.0. | |  | b.  10.0. | |  | c.  3.0. | |  | d.  3.33. | |  |  |  |

* **Question 32**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of the following is not a measure of variability of a single variable ?​ |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  ​Covariance | | Answers: | a.  ​Interquartile range | |  | b.  ​Standard deviation | |  | c.  Range | |  | d.  ​Covariance | |  |  |  |

* **Question 33**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The *p*th percentile is a value such that approximately |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  *p* percent of the observations are less than the value and (100 - *p*) percent are more than this value. | | Answers: | a.  *p* percent of the observations are less than the value and (100 - *p*) percent are more than this value. | |  | b.  *p* percent of the observations are less than the value and *p* percent are more than this value. | |  | c.  (100 - *p*) percent of the observations are less than the value and *p* percent are more than this value. | |  | d.  (100 - *p*) percent of the observations are less than the value and (100 - *p*) percent are more than this value. | |  |  |  |

* **Question 34**

0.5 out of 0.5 points

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| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of the following symbols represents the standard deviation of the population? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  *σ* | | Answers: | a.  *σ2* | |  | b.  *σ* | |  | c.  *μ* | |  | d. | |  |  |  |

* **Question 35**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | A numerical value used as a summary measure for a sample, such as sample mean, is known as a |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  sample statistic. | | Answers: | a.  sample parameter. | |  | b.  population mean. | |  | c.  population parameter. | |  | d.  sample statistic. | |  |  |  |

* **Question 36**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | ​The percentage of data values that must be within one, two, and three standard deviations of the mean for data having a bell-shaped distribution can be determined using |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  The empirical rule. | | Answers: | a.  The empirical rule. | |  | b.  ​Chebyshev's theorem. | |  | c.  ​Percentiles. | |  | d.  ​A five-number summary. | |  |  |  |

* **Question 37**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The numerical value of the variance |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  is always larger than the numerical value of the standard deviation. | | Answers: | a.  can be larger or smaller than the numerical value of the standard deviation. | |  | b.  is always larger than the numerical value of the standard deviation. | |  | c.  is negative if the mean is negative. | |  | d.  is always smaller than the numerical value of the standard deviation. | |  |  |  |

* **Question 38**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of the following is a measure of variability? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  Interquartile range | | Answers: | a.  Percentiles | |  | b.  Quartiles | |  | c.  Interquartile range | |  | d.  Geometric mean | |  |  |  |

* **Question 39**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The closing stock price of MNM Corporation for the last 7 trading days is shown below.   |  |  | | --- | --- | | Day | Stock Price | | 1 | 84 | | 2 | 87 | | 3 | 84 | | 4 | 88 | | 5 | 85 | | 6 | 90 | | 7 | 91 |   ​   The mode is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  84. | | Answers: | a.  84. | |  | b.  85. | |  | c.  87. | |  | d.  86. | |  |  |  |

* **Question 40**

0 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The standard deviation of a sample was reported to be 20. The report indicated that = 7200. What is the sample size? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  17 | | Answers: | a.  19 | |  | b.  17 | |  | c.  18 | |  | d.  16 | |  |  |  |

* **Question 41**

0.5 out of 0.5 points

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| --- | --- | --- | --- | --- |
|  |  | | | |
|  | From a population of size 400, a random sample of 40 items is selected. The median of the sample |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  none of these alternatives is correct. | | Answers: | a.  must be 200, since 400 divided by 2 is 200. | |  | b.  must be 10, since 400 divided by 40 is 10. | |  | c.  must be equal to the median of population, if the sample is ***truly random.*** | |  | d.  none of these alternatives is correct. | |  |  |  |

* **Question 42**

0.5 out of 0.5 points

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| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Geometric mean is a measure of |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  location. | | Answers: | a.  location. | |  | b.  dispersion. | |  | c.  weight. | |  | d.  variability. | |  |  |  |

* **Question 43**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The symbol σ is used to represent |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  the standard deviation of the population. | | Answers: | a.  the standard deviation of the population. | |  | b.  the standard deviation of the sample. | |  | c.  the variance of the sample. | |  | d.  the variance of the population. | |  |  |  |

* **Question 44**

0.5 out of 0.5 points

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| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The 75th percentile is referred to as the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  third quartile. | | Answers: | a.  fourth quartile. | |  | b.  second quartile. | |  | c.  third quartile. | |  | d.  first quartile. | |  |  |  |

* **Question 45**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The relative frequency of a class is computed by |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  dividing the frequency of the class by the sample size. | | Answers: | a.  dividing the frequency of the class by the sample size. | |  | b.  dividing the frequency of the class by the midpoint. | |  | c.  dividing the sample size by the frequency of the class. | |  | d.  dividing the midpoint of the class by the sample size. | |  |  |  |

* **Question 46**

0.5 out of 0.5 points

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| --- | --- | --- | --- | --- |
|  |  | | | |
|  | When the data are skewed to the right, the measure of Skewness will be |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | a.  positive. | | Answers: | a.  positive. | |  | b.  zero. | |  | c.  one. | |  | d.  negative. | |  |  |  |

* **Question 47**

0.5 out of 0.5 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | ​A mean computed in such a way that each data value is given a weight reflecting its importance is referred to as a |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  ​weighted mean. | | Answers: | a.  ​geometric mean. | |  | b.  ​balanced mean. | |  | c.  ​weighted mean. | |  | d.  ​trimmed mean. | |  |  |  |

* **Question 48**

0.5 out of 0.5 points

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|  |  | | | |
|  | Which of the following is **not** a measure of variability? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  Mode | | Answers: | a.  Standard deviation | |  | b.  Mode | |  | c.  Range | |  | d.  Interquartile range | |  |  |  |

* **Question 49**

0 out of 0.5 points

|  |  |  |  |  |
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|  |  | | | |
|  | The sample variance |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  is always smaller than the true value of the population variance. | | Answers: | a.  could be smaller, equal to, or larger than the true value of the population variance. | |  | b.  can never be zero. | |  | c.  is always smaller than the true value of the population variance. | |  | d.  is always larger than the true value of the population variance. | |  |  |  |

* **Question 50**

0.5 out of 0.5 points

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|  | The descriptive measure of variability that is based on the concept of a deviation about the mean is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  the standard deviation. | | Answers: | a.  the interquartile range. | |  | b.  the standard deviation. | |  | c.  the range. | |  | d.  the absolute value of the range. | |  |  |  |

* **Question 51**

0.5 out of 0.5 points

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|  | When a percentage of the smallest and largest values are deleted from a data set, the mean of the remaining data values is the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  trimmed mean. | | Answers: | a.  geometric mean. | |  | b.  weighted mean. | |  | c.  trimmed mean. | |  | d.  interquartile mean. | |  |  |  |

* **Question 52**

0.5 out of 0.5 points

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|  |  | | | |
|  | Growth factors for the population of Atlanta in the past five years have been 1, 2, 3, 4 , and 5. The geometric mean is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  . | | Answers: | a.  15. | |  | b.  . | |  | c.  . | |  | d.  . | |  |  |  |

* **Question 53**

0.5 out of 0.5 points

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|  |  | | | |
|  | The closing stock price of MNM Corporation for the last 7 trading days is shown below.   |  |  | | --- | --- | | Day | Stock Price | | 1 | 84 | | 2 | 87 | | 3 | 84 | | 4 | 88 | | 5 | 85 | | 6 | 90 | | 7 | 91 |   ​  The variance is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  8. | | Answers: | a.  9. | |  | b.  8. | |  | c.  2.828. | |  | d.  81. | |  |  |  |

* **Question 54**

0.5 out of 0.5 points

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|  | The difference between the largest and the smallest data values is the |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  range. | | Answers: | a.  interquartile range. | |  | b.  coefficient of variation. | |  | c.  variance. | |  | d.  range. | |  |  |  |

* **Question 55**

0 out of 0.5 points

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|  |  | | | |
|  | In computing descriptive statistics from grouped data, |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  none of these alternatives is correct. | | Answers: | a.  data values are treated as if they occur at the midpoint of a class. | |  | b.  the grouped data result is more accurate than the ungrouped result. | |  | c.  the grouped data computations are used only when a population is being analyzed. | |  | d.  none of these alternatives is correct. | |  |  |  |

* **Question 56**

0.5 out of 0.5 points

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|  | If two groups of numbers have the same mean, then |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  other measures of location need not be the same. | | Answers: | a.  their standard deviations must also be equal. | |  | b.  their medians must also be equal. | |  | c.  their modes must also be equal. | |  | d.  other measures of location need not be the same. | |  |  |  |

* **Question 57**

0.5 out of 0.5 points

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| --- | --- | --- | --- | --- |
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|  | If the coefficient of variation is 40% and the mean is 70, then the variance is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | d.  784. | | Answers: | a.  1.75. | |  | b.  2800. | |  | c.  28. | |  | d.  784. | |  |  |  |

* **Question 58**

0 out of 0.5 points

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|  |  | | | |
|  | The sum of deviations of the individual data elements from their mean is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  sometimes greater than and sometimes less than zero, depending on the data elements. | | Answers: | a.  always less than zero. | |  | b.  sometimes greater than and sometimes less than zero, depending on the data elements. | |  | c.  always greater than zero. | |  | d.  always equal to zero. | |  |  |  |

* **Question 59**

0.5 out of 0.5 points

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|  |  | | | |
|  | ​Which of the following descriptive statistics is not measured in the same units as the data? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | b.  ​Variance | | Answers: | a.  Standard deviation | |  | b.  ​Variance | |  | c.  ​Interquartile range | |  | d.  ​35th percentile | |  |  |  |

* **Question 60**

0.5 out of 0.5 points

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|  |  | | | |
|  | A researcher has collected the following sample data. The mean of the sample is 5.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 3 | 5 | 12 | 3 | 2 |   The interquartile range is |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | c.  6. | | Answers: | a.  9. | |  | b.  2.25. | |  | c.  6. | |  | d.  2. | |  |  |  |

Wednesday, February 12, 2020 2:28:54 PM PST