Assignment 3

Due on 2020-03-18, 11:29:07.

The data set for submitting this assignment has been provided. As your assignment is submitted, your solutions will be assessed immediately. Please ensure that your submission is the best it can be. Your marks will be dependent on the correctness of your answers. Each question has a specific number of points allocated, and the total possible marks are 100.

Please note that questions that are marked with an asterisk (*) are considered as challenging questions. These questions require a deeper understanding of the concepts and are designed to assess your ability to apply these concepts in complex situations.

Questions:

1. Which of the following statements is true?
   * The parameter estimates that are used in a linear regression model are unbiased estimates. (1 point)
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   Your answer: (Choose one)

2. What is the mean of the family of a polynomial function?
   * The mean of the family of a polynomial function is the maximum value of the family. (1 point)
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   Your answer: (Choose one)

3. If you are trying to calculate the probability of an event, which of the following is the correct approach?
   * Use the binomial distribution to calculate the probability. (1 point)
   * Use the binomial distribution to calculate the probability. (1 point)
   * Use the binomial distribution to calculate the probability. (1 point)
   * Use the binomial distribution to calculate the probability. (1 point)
   * Use the binomial distribution to calculate the probability. (1 point)

   Your answer: (Choose one)

4. If you are trying to estimate the mean of a normal distribution, which of the following is the correct approach?
   * Use the mean of the normal distribution to estimate the mean. (1 point)
   * Use the mean of the normal distribution to estimate the mean. (1 point)
   * Use the mean of the normal distribution to estimate the mean. (1 point)
   * Use the mean of the normal distribution to estimate the mean. (1 point)
   * Use the mean of the normal distribution to estimate the mean. (1 point)

   Your answer: (Choose one)

5. If you are trying to estimate the standard deviation of a normal distribution, which of the following is the correct approach?
   * Use the mean of the normal distribution to estimate the standard deviation. (1 point)
   * Use the mean of the normal distribution to estimate the standard deviation. (1 point)
   * Use the mean of the normal distribution to estimate the standard deviation. (1 point)
   * Use the mean of the normal distribution to estimate the standard deviation. (1 point)
   * Use the mean of the normal distribution to estimate the standard deviation. (1 point)

   Your answer: (Choose one)

6. If you are trying to estimate the median of a normal distribution, which of the following is the correct approach?
   * Use the mean of the normal distribution to estimate the median. (1 point)
   * Use the mean of the normal distribution to estimate the median. (1 point)
   * Use the mean of the normal distribution to estimate the median. (1 point)
   * Use the mean of the normal distribution to estimate the median. (1 point)
   * Use the mean of the normal distribution to estimate the median. (1 point)

   Your answer: (Choose one)