Assignment 2

The due date for submitting this assignment has passed. As our current exam, you have not submitted this assignment.

1. The probability that the sum of the values of 2 dice when thrown is equal to 6 is 2 points
   a) 0.33
   b) 1/6
   c) 5/36
   d) 1/10
   - No, your answer is incorrect.

2. Cards are dealt randomly without replacement from a pack. The probability that an ace is drawn on the third draw after a 9 and a king were drawn previously is 2 points
   a) 0.033
   b) 0.081
   c) 0.03
   d) 0.2
   - No, your answer is incorrect.

3. A family has three children. Given that one of the children is a girl, what is the probability that all the children are girls? 2 points
   a) 0.5
   b) 0.33
   c) 0.125
   d) 0.03
   - No, your answer is incorrect.

4. Which of the following statements is true? 2 points
   a) The sum of probabilities of a complete set of mutually exclusive events must be 1.
   b) Independent events can be mutually exclusive.
   c) Mutually exclusive events must be independent.
   d) All of the above.
   - No, your answer is incorrect.

5. A variable must have a normal distribution if it is a normal 2 points
   a) True
   b) False
   - No, your answer is incorrect.

6. Which of the following statements is true with regards to the probability distribution function f(x) at a random variable x? 2 points
   a) f(x) must be less than 1 for all values of x.
   b) f(x) must be non-negative for all values of x.
   c) f(x) can never be greater than 1.
   - No, your answer is incorrect.

7. If a coin is tossed 10 times, what is the expected difference between the number of heads and tails? 2 points
   a) 0
   b) ±5
   c) ±3
   d) ±1
   - No, your answer is incorrect.