WGU C784 APPLIED HEALTHCARE STATISTICS

FINAL EXAM 7 2022/2023

A={14,15,16,17}

B={11,12,13,14,16,17,18,19,20}

A is a subset of B. True or False?

a. True

b. False False. This is a false statement. By definition, to be a subset of a set, every element of the subset must be contained in the set. In this case, Set A contains 15, which Set B does not contain. Therefore A is not a subset of set B.

A union of two sets is a collection of the elements listed in both of the sets.

True or False?

a. True

b. False False. This is a false statement. A union of two sets is a collection of all of the elements listed in the sets.

In mathematics, a set is always a collection of numbers.

True or False?

a. True

b. False False. This is a false statement. In mathematics, a set is often, but not always, a collection of numbers.

A={42,23,11,35,73,97,32,26,41,85,48,61,15}

B={12,23,95,73,27,9,26,43,82,18,63,15,99}

The intersection of A and B is:

a. {23,26,27,73}

b. {15,23,61,73}

c. {15,23,26,73}

d. {15,26,48,73}Correct. The answer is c. An intersection of two sets is a collection of the elements listed in both of the sets.

_____ _____* is calculated as the number of ways one particular event can occur in a random experiment, divided by the total number of possible outcomes: Theoretical probability

If Bob likes the suits equally—that is, each morning he chooses one randomly—what is the probability he will choose to wear blue? 0.6 or 60% see illustration

_____ _____* gathers data by performing multiple experiments, or trials, and recording the results each time. Empirical probability

You examine the number of times a player hit a home run this season, divided by the number of at-bats the player had. What is this an example of?

a) Theoretical Probability

b) Empirical Probability

c) The Law of Large Numbers

d) All of the above The answer is b. We are using the number of times an event occurred to estimate the probability, therefore this is an example of empirical probability.

This set of possible outcomes in an experiment is called the _____ _____. The sample space of flipping a coin is heads and tails. The sample space of rolling a regular six-sided die is 1, 2, 3, 4, 5, and 6. While the sample space is all the different outcomes, the _____ _____ is the number of different outcomes. We need the sample space to determine the sample size, and we need the sample size to calculate probability. The sample size of flipping a coin is 2; the sample size of rolling a six-sided die is 6. 1. sample space*