Type E:

Title: Gender

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. You observe the gender of the next 350 babies born at a local hospital. The random variable represents the number of boys.

Type E:

Title: Marbles

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. You draw a marble 500 times from a bag with three colors of marbles. The random variable represents the color of marble that is drawn.

Type E:

Title: Wheel

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. In a game you spin a wheel that has 19 different letters 950 times. The random variable represents the selected letter on each spin of the wheel.

Type E:

Title: Cough

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. Testing a cough suppressant using 980 people to determine if it is effective. The random variable represents the number of people who find the cough suppressant to be effective.

Type E:

Title: Stocks

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. Survey 500 investors to see how many different stocks they own. The random variable represents the number of different stocks owned by each investor.

Type E:

Title: Student

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. Survey 550 college students see whether they are enrolled as a new student. The random variable represents the number of students enrolled as new students.

Type E:

Title: Meeting

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. Each week, a man attends a club meeting in which he has a 34% chance of meeting a new member. The random variable is the number of times he meets a new member in 44 weeks.

Type E:

Title: Flu

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. You test four flu medicines. The random variable represents the flue medicine that is most effective.

Type E:

Title: Blackjack

1. Decide whether the experiment is a binomial experiment. If it is not, explain why. Each week, a gambler plays blackjack at the local casino. The random variable is the number of times per week the player wins.

Type E:

Title: Cards

Decide whether the experiment is a binomial experiment. If it is not, explain why. Selecting five cards, one at a time without replacement, from a standard deck of cards. The random variable is the number of picture cards obtained.

Answers:

1. binomial experiment

2. Not a binomial experiment. There are more than two outcomes.

3. Not a binomial experiment. There are more than two outcomes.

4. binomial experiment.

5. Not a binomial experiment. There are more than two outcomes.

6. binomial experiment.

7. binomial experiment.

8. Not a binomial experiment. There are more than two outcomes.

9. Not a binomial experiment. There are more than two outcomes.

10. Not a binomial experiment. The probability of success is not the same for each trial.