

Determine whether the binomial distribution is an appropriate model for the probability distribution of the given experiment. Support each statement using the characteristics of a binomial distribution.

1. Toss a fair die five times and record whether the up face of the die shows four dots.
 - a.
 - b.
 - c.
 - d.

2. Randomly draw 10 cards without replacement from a well-shuffled deck of 52 playing cards and observe whether each card is a diamond.
 - a.
 - b.
 - c.
 - d.

3. Randomly interview 200 students about whether they favor a campus issue and count the number of yes responses. Assume that none of the students interviewed refuses to answer the question.
 - a.
 - b.
 - c.
 - d.

4. Test 100 male subjects who were given an experimental drug to prevent a certain flu strain and count the number of subjects who show symptoms consistent with that particular flu strain.
 - a.
 - b.
 - c.
 - d.