**Class 10 Worksheet**

**Stat 11**

Group name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reporter: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If a fair die is rolled five times, which of the following sequences is most likely to result?
2. 2 6 1 5 3
3. 6 4 2 1 5
4. 2 4 4 4 4
5. 2 6 1 5 3 and 6 4 2 1 5 are equally likely and they are more likely than 2 4 4 4 4
6. 2 6 1 5 3, 6 4 2 1 5, and 2 4 4 4 4 are all equally likely
7. If you flip a fair coin and get heads 5 times in a row, what is the chance of getting tails on the next flip?

a) Greater than 0.5

b) 0.5

b) Less than 0.5

1. Two boxes contain red and blue balls. Box 1 has 14 blue balls and 4 red balls. Box 2 has 10 blue balls and 2 red balls. There are more blue balls in Box 1 than Box 2. If you pick one ball at random from each box, which of the following are more likely
2. You choose a blue ball from Box 1.
3. You choose a blue ball from Box 2.
4. There is no way to tell.
5. Suppose a fair coin will be flipped twice. Consider the following three events:

A: 0 heads are observed

B: 1 head is observed

C: 2 heads are observed

Which of the following is true?

1. P(A) < P(B) < P(C)
2. P(A) = P(B) = P(C)
3. P(B) is greater than P(A) and P(B)
4. None of the above.
5. Think about the following two probabilities:

The probability that a man that is over 6 feet tall is a professional basketball player

The probability that a man is over 6 feet tall given that he is a professional basketball player

Which of the following most likely to be true?

1. Probability 1 is greater than probability 2.
2. Probability 2 is greater than probability 1.
3. The two probabilities are equal.
4. It is impossible to tell.
5. Think about the following two probabilities:

The probability that a randomly selected adult American likes to surf

The probability that a randomly selected adult American lives in California and likes to

surf

Which of the following is most likely to be true?

1. Probability 1 is greater than probability 2.
2. Probability 2 is greater than probability 1.
3. The two probabilities are equal.
4. It is impossible to tell.