## SAT Focused Practice Worksheet 4- Probability - <br> -Probability-Permutation-Combination

## Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. A bag contains 3 green balls, 5 black balls, and 7 red balls. If two balls are removed at random and no ball is returned to the bag after the removal, what is the probability that the first ball is red and the second ball is black?
a. $\frac{1}{9}$
b. $\frac{1}{6}$
c. $\frac{3}{14}$
d. $\frac{7}{45}$
e. $\frac{1}{10}$
2. A coin was flipped 10 times and came up heads 4 times and tails 6 times. If the first and eighth flips were both tails, what is the greatest number of consecutive tails that could have occurred?
a. 8
b. 5
c. 4
d. 10
e. 6
3. When one student is chosen at random from the Debate Club, the probability that a boy is chosen is $\frac{2}{5}$. There are currently 25 students on the Debate Club. How many boys would have to join the club in order for the probability of choosing a boy at random to be $\frac{1}{2}$ ?
a. 3
b. 2
c. 5
d. 1
e. 4

## Short Answer

4. What is the number of distinct 4-person committees that can be chosen from a group of 6 people?
5. Two dice are rolled together. What is the probability of getting two numbers whose sum is greater than 7 ?
