1. With the throw of two dice, what is the probability that the sum will be a prime number? (A) (B) (C) (D) (E)

2. If a coin is flipped and one die is thrown, what is the probability of getting a head or a 4? (A) (B) (C) (D) (E)

3. Three cards are drawn from an ordinary deck of 52 cards. Each card is replaced in the deck before the next card is drawn. What is the probability that at least one of the cards will be a spade? (A) (B) (C) (D) (E)

4. A coin is tossed three times. Let A = {three heads occur} and B = {at least one head occurs}. What is P(AUB )? (A) (B) (C) (D) (E)

5. A class has 12 boys and 4 girls. If three students are selected at random from the class, what is the probability that all will be boys? (A) (B) (C) (D) (E)

6. A red box contains eight items, of which three are defective, and a blue box contains five items, of which two are defective. An item is drawn at random from each box. What is the probability that both items will be nondefective? (A) (B) (C) (D) (E)

7. A hotel has five single rooms available, for which six men and three women apply. What is the probability that the rooms will be rented to three men and two women? (A) (B) (C) (D) (E)

8. Of all the articles in a box, 80% are satisfactory, while 20% are not. The probability of obtaining exactly five good items out of eight randomly selected articles is (A) 0.003 (B) 0.013 (C) 0.132 (D) 0.147 (E) 0.800