1. A bag contains 5 red,8 green and 7 white balls. One ball is drawn at random from the bag. What is the probability of getting a white ball or a green ball.

   (Ans: $\frac{3}{4}$)

2. One card is drawn from a well shuffled deck of 52 playing cards. What is the probability of getting a non-face card. (Ans: $\frac{10}{13}$)

3. What is the probability that a leap year has 53 Tuesdays and 53 Mondays

   (Ans: $\frac{1}{7}$)

4. Two dice are thrown simultaneously. Find the probability of getting:
   a) An even no as the sum
   b) The sum as a prime number
   c) A total of at least 10
   d) A doublet of even number
   e) Same number on both dice

   (Ans: $\frac{1}{2}$, $\frac{5}{12}$, $\frac{1}{6}$, $\frac{1}{12}$, $\frac{1}{6}$)

5. Two unbiased coins are tossed simultaneously. Find the probability of getting:
   a) 2 heads   b) one head   c) at least one head   d) At most one head   e) no head

   (Ans: $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{3}{4}$, $\frac{1}{4}$)

6. A card is drawn at random from a well shuffled deck of 52 playing cards. What is the probability of getting a black king (Ans: $\frac{1}{26}$)

7. For an event E, P(E) + P (Ē) = x, then the value of $x^3 - 3$ is   (Ans: −2)

8. A letter of English alphabet is chosen at random. Determine the probability that the chosen letter is a consonant (Ans: $\frac{21}{26}$)

9. Two different dice are tossed together. Find the probability that the product of two numbers on the top of the dice is 6 (Ans: $\frac{1}{9}$)

10. A box contains cards numbered 11 to 123. A card is drawn at random from the box. Find the probability that the number on the drawn card is

   a) A square number   b) a multiple of 7   (Ans: $\frac{8}{113}$, $\frac{16}{113}$)

11. A bag contains 3 red and 5 black balls. A ball is drawn at random from the bag, what is the probability that the ball drawn is not red   (Ans: $\frac{5}{8}$)

12. A card is drawn at random from a well shuffled deck of 52 cards. Find the probability of getting neither a red card nor a queen   (Ans: : $\frac{6}{13}$)

13. If a number x is chosen at random from the numbers -3,-2,-1,0,1,2,3 ,then find the probability of $x^2 < 4$.   (Ans: : $\frac{3}{7}$)

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