

Practice Questions - Term I

Date: 15/11/2021

Subject: Mathematics

Topic : Probability

Class: X

1. If three coins are tossed simultaneously, then the probability of getting at least one head and tail is _____.

A. $\frac{1}{4}$
B. $\frac{1}{2}$
C. $\frac{3}{4}$
D. $\frac{2}{3}$

2. In a simultaneous throw of a pair of dice, find the probability of getting same value on both.

A. $\frac{1}{36}$
B. $\frac{1}{6}$
C. $\frac{1}{3}$
D. $\frac{5}{6}$

3. A card is drawn at random from a pack of 52 cards. Find the probability that the card drawn is black or king.

A. $\frac{1}{2}$
B. $\frac{7}{13}$
C. $\frac{15}{26}$
D. $\frac{8}{13}$

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4. Find the probability that a number selected at random from the numbers 1 to 25 is not a prime number.
- A. $\frac{8}{25}$
- B. $\frac{9}{25}$
- C. $\frac{3}{5}$
- D. $\frac{16}{25}$
5. A card is drawn from a well-shuffled deck of playing cards. Find the probability of drawing a black card which is neither a face card nor an ace?
- A. $\frac{9}{52}$
- B. $\frac{9}{26}$
- C. $\frac{9}{13}$
- D. $\frac{10}{13}$
6. 3 people A, B and C are sitting in a circular fashion. Find the probability that A and B do not sit together.
- A. 0
- B. $\frac{1}{2}$
- C. $\frac{1}{3}$
- D. 1

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7. Two players, Anand and Vishwa are playing a tennis match. The probability of Vishwa winning the match is 0.75. What is the probability of Anand winning the match?
- A. $\frac{4}{3}$
- B. $\frac{2}{4}$
- C. $\frac{1}{4}$
- D. $\frac{3}{4}$
8. There are 2 men X and Y who were born in the same year. If X's date of birth is on 19th December 1990, how many dates are possible for Y to be born such that he doesn't have the same birthday as X?
- A. 364
- B. 360
- C. 365
- D. 300
9. Ram is about to toss 2 fair coins. If he is asked to find the probability that there is at least 1 head, list the favourable outcomes.
- A. (H, H) (H, T)
- B. (H, T) (T, H)
- C. (H, H) (H, T) (T, H)
- D. (T, T) (H, T) (T, H)

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10. A factory produces cricket balls. The probability that the manufactured ball is defective is 0.05. Then, the probability of the ball being perfect will be:
- A. 0.95
 - B. 1.05
 - C. 1
 - D. 0
11. If $P(E)$ and $P(E')$ are the probabilities of two complementary events, then which of the following is always true?
- A. $P(E) + P(E') = 0$
 - B. $P(E) + P(E') = 1$
 - C. $P(E) = P(E')$
 - D. $P(E) + P(E') = \frac{1}{2}$
12. The lock of a suitcase is a 3 digit number. The owner of the suitcase has forgotten the digit at unit's place. If the digit is an even number, then the number of favourable outcomes for units place is__.
- A. 2
 - B. 4
 - C. 5
 - D. 10

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13. A bag contains 8 red, 2 black and 7 white balls. One ball is drawn at random. The probability that the ball drawn is not white is__.
- A. $\frac{5}{17}$
- B. $\frac{10}{17}$
- C. $\frac{2}{17}$
- D. $\frac{8}{17}$
14. The probability of an event not happening is 0.95, then the probability of the event happening is ____
- A. 0.5
- B. 0.05
- C. 5.0
- D. 0.25
15. Out of 50 students in a class taking a test, 35 of them passed whereas the other 15 failed. What is the probability that a student selected at random passed the test?
- A. 0.15
- B. 0.3
- C. 0.35
- D. 0.7

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16. In a cricket match, a batsman hit a boundary 6 times (out of 30 balls). Find the probability that next ball he plays is not a boundary.
- A. 0.2
 - B. 0.4
 - C. 0.6
 - D. 0.8
17. The record of a weather station shows that out of the past 200 consecutive days, its weather forecasts were correct 150 times.
What is the probability that the weather report will be incorrect for the next day?
- A. 0.2
 - B. 0.75
 - C. 0.35
 - D. 0.25
18. Nick tosses three coins simultaneously. What is the probability of getting at least two heads?
- A. $\frac{3}{4}$
 - B. $\frac{5}{8}$
 - C. $\frac{7}{8}$
 - D. $\frac{1}{2}$

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19. A box contains tickets, numbered with 11, 12, 13, ..., 40. A ticket is taken out from the box at random. Find the probability that the number on the drawn ticket is greater than 25 and multiple of 7.

A. $\frac{1}{20}$

B. $\frac{1}{15}$

C. $\frac{1}{5}$

D. $\frac{3}{20}$

20. The probability of picking the letter K if you pick a random letter from the word *TREKKING* is $\frac{x}{4}$. Then x is ____.

A. 1

B. 0

C. 2

D. 0.5