EduSahara™ Assignment

Name : Chance and Probability

Chapter : Data Handling

Grade : CBSE Grade VIII

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1. A single unbiased coin is tossed. Find the probability of getting a head.

   (i) $\frac{4}{5}$ (ii) $\frac{2}{3}$ (iii) $\frac{1}{2}$ (iv) $\frac{3}{4}$ (v) $\frac{5}{6}$

2. Two unbiased coins are tossed simultaneously. Find the probability of getting exactly one head.

   (i) $\frac{4}{5}$ (ii) $\frac{5}{6}$ (iii) $\frac{1}{2}$ (iv) $\frac{3}{4}$ (v) $\frac{2}{3}$

3. Two unbiased coins are tossed simultaneously. Find the probability of getting at least one head.

   (i) $\frac{1}{2}$ (ii) $\frac{4}{5}$ (iii) $\frac{1}{4}$ (iv) 1 (v) $\frac{3}{4}$

4. Two unbiased coins are tossed simultaneously. Find the probability of getting at least two heads.

   (i) $\frac{1}{2}$ (ii) $\frac{2}{5}$ (iii) $\frac{1}{4}$ (iv) $\frac{3}{4}$ (v) 0

5. Two unbiased coins are tossed simultaneously. Find the probability of getting at most one head.

   (i) 1 (ii) $\frac{1}{2}$ (iii) $\frac{1}{4}$ (iv) $\frac{3}{4}$ (v) $\frac{4}{5}$

6. Two unbiased coins are tossed simultaneously. Find the probability of getting no head.

   (i) $\frac{1}{4}$ (ii) $\frac{1}{2}$ (iii) 0 (iv) $\frac{2}{5}$ (v) $\frac{3}{4}$

7. Three unbiased coins are tossed simultaneously. Find the probability of getting exactly one head.

   (i) $\frac{4}{9}$ (ii) $\frac{1}{2}$ (iii) $\frac{3}{8}$ (iv) $\frac{1}{4}$ (v) $\frac{5}{8}$

8. Three unbiased coins are tossed simultaneously. Find the probability of getting at least one head.

   (i) 1 (ii) $\frac{7}{8}$ (iii) $\frac{1}{8}$ (iv) $\frac{3}{4}$ (v) $\frac{8}{9}$

9. Three unbiased coins are tossed simultaneously. Find the probability of getting at least two heads.

   (i) $\frac{4}{5}$ (ii) $\frac{5}{6}$ (iii) $\frac{3}{4}$ (iv) $\frac{2}{3}$ (v) $\frac{1}{2}$

10. Three unbiased coins are tossed simultaneously. Find the probability of getting at most one head.

    (i) $\frac{5}{6}$ (ii) $\frac{4}{5}$ (iii) $\frac{3}{4}$ (iv) $\frac{1}{2}$ (v) $\frac{2}{3}$

11. Three unbiased coins are tossed simultaneously. Find the probability of getting no head.

(i) $\frac{1}{8}$ (ii) $\frac{7}{8}$ (iii) 0 (iv) $\frac{1}{4}$ (v) $\frac{2}{9}$

12. Two unbiased dice are thrown simultaneously. Find the probability of getting a doublet.

(i) 0 (ii) $\frac{1}{6}$ (iii) $\frac{5}{6}$ (iv) $\frac{1}{3}$ (v) $\frac{2}{7}$

13. Two unbiased dice are thrown simultaneously. Find the probability of getting 7 as the sum of the two numbers on the dice.

(i) $\frac{2}{7}$ (ii) $\frac{5}{6}$ (iii) $\frac{1}{3}$ (iv) $\frac{1}{6}$ (v) 0

14. A die is thrown twice. What is the probability that 5 will come up atleast once?

(i) $\frac{12}{37}$ (ii) $\frac{5}{18}$ (iii) $\frac{11}{36}$ (iv) $\frac{25}{36}$ (v) $\frac{1}{3}$

15. A die is thrown twice. What is the probability that 6 will not come up either time?

(i) $\frac{13}{18}$ (ii) $\frac{2}{3}$ (iii) $\frac{25}{36}$ (iv) $\frac{26}{37}$ (v) $\frac{11}{36}$

16. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is a queen?

(i) $\frac{1}{4}$ (ii) $\frac{1}{26}$ (iii) $\frac{3}{13}$ (iv) $\frac{1}{13}$ (v) $\frac{1}{52}$

17. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is a red queen?

(i) $\frac{1}{26}$ (ii) $\frac{1}{4}$ (iii) $\frac{1}{52}$ (iv) $\frac{1}{13}$ (v) $\frac{3}{13}$

18. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is a jack of hearts?

(i) $\frac{1}{13}$ (ii) $\frac{1}{26}$ (iii) $\frac{3}{13}$ (iv) $\frac{1}{52}$ (v) $\frac{1}{4}$

19. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is '2' of spades?

(i) $\frac{1}{52}$ (ii) $\frac{1}{4}$ (iii) $\frac{1}{13}$ (iv) $\frac{1}{26}$ (v) $\frac{3}{13}$

20. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is '3' of red suit ?

(i) $\frac{1}{52}$ (ii) $\frac{1}{4}$ (iii) $\frac{1}{26}$ (iv) $\frac{1}{13}$ (v) $\frac{3}{13}$

21. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is a hearts?

(i) $\frac{1}{13}$ (ii) $\frac{1}{4}$ (iii) $\frac{1}{52}$ (iv) $\frac{3}{13}$ (v) $\frac{1}{26}$

22. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is a face card ?

(i) $\frac{3}{13}$ (ii) $\frac{1}{4}$ (iii) $\frac{1}{13}$ (iv) $\frac{1}{52}$ (v) $\frac{1}{26}$

23. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is either a red card or a king?

(i) $\frac{7}{13}$ (ii) $\frac{1}{52}$ (iii) $\frac{1}{26}$ (iv) $\frac{3}{13}$ (v) $\frac{1}{13}$

24. An unbiased die is thrown once. Find the probability of getting a prime number?

(i) $\frac{3}{4}$ (ii) $\frac{4}{5}$ (iii) $\frac{2}{3}$ (iv) $\frac{5}{6}$ (v) $\frac{1}{2}$

25. An unbiased die is thrown once. Find the probability of getting an even number?

(i) $\frac{4}{5}$ (ii) $\frac{3}{4}$ (iii) $\frac{2}{3}$ (iv) $\frac{5}{6}$ (v) $\frac{1}{2}$

26. An unbiased die is thrown once. Find the probability of getting a 3?

(i) 0 (ii) $\frac{5}{6}$ (iii) $\frac{1}{3}$ (iv) $\frac{2}{7}$ (v) $\frac{1}{6}$

27. An unbiased die is thrown once. Find the probability of getting a number greater than 1?

(i) $\frac{2}{3}$ (ii) 1 (iii) $\frac{6}{7}$ (iv) $\frac{5}{6}$ (v) $\frac{1}{6}$

28. An unbiased die is thrown once. Find the probability of getting a number less than 6?

(i) $\frac{1}{6}$ (ii) $\frac{6}{7}$ (iii) 1 (iv) $\frac{5}{6}$ (v) $\frac{2}{3}$

29. An unbiased die is thrown once. Find the probability of getting a number between 3 and 6?

(i) $\frac{1}{3}$ (ii) $\frac{1}{2}$ (iii) $\frac{2}{3}$ (iv) 0

30. A box contains 9 blue balls, 33 pink balls, 30 gray balls and 12 yellow balls. One ball is drawn at random from the box. Find the probability that the ball drawn is pink.

(i) $\frac{3}{7}$ (ii) $\frac{5}{14}$ (iii) $\frac{11}{28}$ (iv) $\frac{12}{29}$ (v) $\frac{17}{28}$

31. A bag contains 24 orange marbles, 14 yellow marbles, 24 gray marbles and 22 pink marbles. One marble is drawn at random from the bag. Find the probability that the marble drawn is not orange.

(i) $\frac{6}{7}$ (ii) $\frac{5}{7}$ (iii) $\frac{3}{4}$ (iv) $\frac{2}{7}$ (v) $\frac{4}{7}$

32. A bag contains 5 yellow balls, 25 gray balls, 10 pink balls and 70 white balls. One ball is drawn at random from the bag. Find the probability that the ball drawn is yellow or pink.

(i) $\frac{19}{22}$ (ii) $\frac{1}{11}$ (iii) $\frac{2}{11}$ (iv) $\frac{4}{23}$ (v) $\frac{3}{22}$

33. A bag contains 3 pink balls, 24 red balls, 36 gray balls and 30 white balls. One ball is drawn at random from the bag. Find the probability that the ball drawn is neither white nor gray.

(i) $\frac{10}{31}$ (ii) $\frac{22}{31}$ (iii) $\frac{9}{31}$ (iv) $\frac{8}{31}$ (v) $\frac{5}{16}$

34. Which of the following experiments have equally likely outcomes?

a) A ball is hit. It reaches the boundary or not
b) A baby is born. It is a boy or girl
c) A man throws a die. The number on the top is either 1 or not 1
d) A man starts his vehicle. It starts or it does not starts
e) A true/false question is attempted. The answer is either right or wrong

(i) {c,e,b} (ii) {a,b} (iii) {c,e} (iv) {b,e} (v) {d,a,b}

35. A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears a two-digit number.

(i) $\frac{1}{10}$ (ii) $\frac{4}{5}$ (iii) $\frac{10}{11}$ (iv) $\frac{9}{10}$ (v) 1

36. A box contains 70 discs which are numbered from 1 to 70. If one disc is drawn at random from the box, find the probability that it bears a perfect square number.

(i) $\frac{5}{36}$ (ii) $\frac{1}{7}$ (iii) $\frac{31}{35}$ (iv) $\frac{3}{35}$ (v) $\frac{4}{35}$

37. 81 cards are numbered 1,2,3,....81 and put in a box and mixed thoroughly. A card is drawn at random. What is the probability that the number on the drawn card is an odd number?

(i) $\frac{21}{41}$ (ii) $\frac{14}{27}$ (iii) $\frac{40}{81}$ (iv) $\frac{41}{81}$

38. 97 cards are numbered 1,2,3,....97 and put in a box and mixed thoroughly. A card is drawn at random. What is the probability that the number on the drawn card is less then 17?

(i) $\frac{17}{97}$ (ii) $\frac{81}{97}$ (iii) $\frac{17}{98}$ (iv) $\frac{16}{97}$ (v) $\frac{15}{97}$

## Assignment Key

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|---|---|---|---|---|---|
| 1) (iii) | 2) (iii) | 3) (v) | 4) (iii) | 5) (iv) | 6) (i) |
| 7) (iii) | 8) (ii) | 9) (v) | 10) (iv) | 11) (i) | 12) (ii) |
| 13) (iv) | 14) (iii) | 15) (iii) | 16) (iv) | 17) (i) | 18) (iv) |
| 19) (i) | 20) (iii) | 21) (ii) | 22) (i) | 23) (i) | 24) (v) |
| 25) (v) | 26) (v) | 27) (iv) | 28) (iv) | 29) (i) | 30) (iii) |
| 31) (ii) | 32) (v) | 33) (iii) | 34) (iv) | 35) (iv) | 36) (v) |
| 37) (iv) | 38) (iv) | | | | |

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