

**EduSahara™ Learning Center Assignment**

**Grade** : Class VIII, CBSE  
**Chapter** : Data Handling  
**Name** : Chance and Probability  
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1. A single unbiased coin is tossed. Find the probability of getting a head

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

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

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

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) 1 (iv)  $\frac{3}{4}$  (v)  $\frac{1}{4}$
- 

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)  $\frac{3}{4}$  (iv)  $\frac{1}{4}$  (v) 0
- 

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

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

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

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

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

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

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

- (i) 1 (ii)  $\frac{1}{8}$  (iii)  $\frac{7}{8}$  (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)  $\frac{1}{2}$  (ii)  $\frac{3}{4}$  (iii)  $\frac{5}{6}$  (iv)  $\frac{2}{3}$  (v)  $\frac{4}{5}$
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10. Three unbiased coins are tossed simultaneously. Find the probability of getting at most one head
- (i)  $\frac{1}{2}$  (ii)  $\frac{3}{4}$  (iii)  $\frac{4}{5}$  (iv)  $\frac{5}{6}$  (v)  $\frac{2}{3}$
- 
11. Three unbiased coins are tossed simultaneously. Find the probability of getting no head
- (i) 0 (ii)  $\frac{1}{4}$  (iii)  $\frac{2}{9}$  (iv)  $\frac{1}{8}$  (v)  $\frac{7}{8}$
- 
12. Two unbiased dice are thrown simultaneously. Find the probability of getting a doublet
- (i)  $\frac{2}{7}$  (ii) 0 (iii)  $\frac{1}{6}$  (iv)  $\frac{1}{3}$  (v)  $\frac{5}{6}$
- 
13. Two unbiased dice are thrown simultaneously. Find the probability of getting 11 as the sum of the two numbers on the dice
- (i) 0 (ii)  $\frac{1}{18}$  (iii)  $\frac{2}{19}$  (iv)  $\frac{17}{18}$  (v)  $\frac{1}{9}$
- 
14. A die is thrown twice. What is the probability that 6 will come up atleast once?
- (i)  $\frac{11}{36}$  (ii)  $\frac{5}{18}$  (iii)  $\frac{12}{37}$  (iv)  $\frac{1}{3}$  (v)  $\frac{25}{36}$
- 
15. A die is thrown twice. What is the probability that 4 will not come up either time?
- (i)  $\frac{25}{36}$  (ii)  $\frac{11}{36}$  (iii)  $\frac{26}{37}$  (iv)  $\frac{13}{18}$  (v)  $\frac{2}{3}$
- 
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)  $\frac{3}{13}$  (ii)  $\frac{1}{4}$  (iii)  $\frac{1}{52}$  (iv)  $\frac{1}{13}$  (v)  $\frac{1}{26}$
- 
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 king?
- (i)  $\frac{1}{26}$  (ii)  $\frac{1}{4}$  (iii)  $\frac{1}{52}$  (iv)  $\frac{3}{13}$  (v)  $\frac{1}{13}$
- 
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 queen of spades?
- (i)  $\frac{3}{13}$  (ii)  $\frac{1}{13}$  (iii)  $\frac{1}{52}$  (iv)  $\frac{1}{4}$  (v)  $\frac{1}{26}$
- 
19. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is '4' of diamonds?
- (i)  $\frac{1}{13}$  (ii)  $\frac{3}{13}$  (iii)  $\frac{1}{26}$  (iv)  $\frac{1}{4}$  (v)  $\frac{1}{52}$
- 
20. One card is drawn at random from a well shuffled deck of 52 cards. What is the probability that the card drawn is '6' of black suit ?

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

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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 spades?

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

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

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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 black card or a jack?

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

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

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

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

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

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

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

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27. An unbiased die is thrown once. Find the probability of getting a number greater than 4?

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

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28. An unbiased die is thrown once. Find the probability of getting a number less than 4?

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

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29. An unbiased die is thrown once. Find the probability of getting a number between 2 and 5?

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

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30. A bag contains 75 pink balls, 20 black balls, 30 white balls and 60 red balls. One ball is drawn at random from the bag. Find the probability that the ball drawn is black

(i)  $\frac{4}{37}$  (ii)  $\frac{3}{37}$  (iii)  $\frac{5}{37}$  (iv)  $\frac{5}{38}$  (v)  $\frac{33}{37}$

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31. A box contains 20 orange balls, 65 pink balls, 15 gray balls and 25 red balls. One ball is drawn at random from the box. Find the probability that the ball drawn is not orange

$$(i) \frac{4}{25} \quad (ii) \frac{4}{5} \quad (iii) \frac{21}{25} \quad (iv) \frac{11}{13} \quad (v) \frac{22}{25}$$

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32. A box contains 24 yellow balls, 2 white balls, 6 red balls and 4 orange balls. One ball is drawn at random from the box. Find the probability that the ball drawn is yellow or red

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

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33. A bag contains 4 blue marbles, 32 white marbles, 28 yellow marbles and 40 red marbles. One marble is drawn at random from the bag. Find the probability that the marble drawn is neither red nor white

$$(i) \frac{4}{13} \quad (ii) \frac{5}{13} \quad (iii) \frac{3}{13} \quad (iv) \frac{9}{13} \quad (v) \frac{5}{14}$$

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

- a) A man throws a die. The number on the top is either 1 or not 1
- b) A man starts his vehicle. It starts or it does not start
- c) A ball is hit. It reaches the boundary or not
- d) A baby is born, it is a boy or girl

$$(i) \{b,c\} \quad (ii) \{b,a\} \quad (iii) \{a,c,d\} \quad (iv) \{b,d\} \quad (v) \{b,a,c\}$$

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35. A box contains 80 discs which are numbered from 1 to 80. If one disc is drawn at random from the box, find the probability that it bears a two-digit number

$$(i) \frac{7}{8} \quad (ii) \frac{9}{10} \quad (iii) \frac{71}{80} \quad (iv) \frac{8}{9} \quad (v) \frac{9}{80}$$

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36. A box contains 30 discs which are numbered from 1 to 30. If one disc is drawn at random from the box, find the probability that it bears a perfect square number

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

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37. 82 cards are numbered 1,2,3,...82 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?

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

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38. 99 cards are numbered 1,2,3,...99 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 than 24?

$$(i) \frac{6}{25} \quad (ii) \frac{8}{33} \quad (iii) \frac{2}{9} \quad (iv) \frac{76}{99} \quad (v) \frac{23}{99}$$

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## Assignment Key

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