MATHS

BOOKS - MCGROW HILL EDUCATION MATHS (HINGLISH)

PROBABILITY

Illustrative Examples

1. In a throw of a coin, find the probability of getting a head.

2. Two unbiassed coins are tossed. Find the proability of getting at the most one head.

3. An unbiased die is tossed. Find the probability of getting a multiple of 3.

4. In a simultaneous throw of a pair of dice, find the probability of getting a total more than 7.

▶ **Watch Video Solution**

5. Two dice are thrown together. What is the probability that the sum of the numbers on the two faces is divisible by 4 or 6?

▶ **Watch Video Solution**

6. A bag contains 6 white and 4 black balls. Two balls are drawn at random. The probability that they are of the same colour is

7. Find the probability that a non - leap year contains a) 53 Sundays b) 52 sundays

Multiple Choice Questions

1. Two coins are tossed simultaneously. What is the probability of getting at least one head?

A. $\dfrac{1}{2}$

B. $\dfrac{1}{3}$

C. $\dfrac{2}{3}$

D. $\dfrac{3}{4}$

Answer: D

▶ **Watch Video Solution**

2. Three unbiased coins are tossed. What is the probability of getting at most two heads ?

A. $\dfrac{1}{4}$

B. $\dfrac{1}{2}$

C. $\dfrac{1}{3}$

D. $\dfrac{1}{8}$

Answer: B

▶ **Watch Video Solution**

3. Three unbiased coins are tossed. What is the probability of getting at most two heads ?

A. $\dfrac{3}{4}$

B. $\dfrac{1}{4}$

C. $\dfrac{3}{8}$

D. $\dfrac{7}{8}$

Answer: D

▶ Watch Video Solution

4. In a single throw of a die, what is the probabilityy of getting a number greater than or equal to 4?

A. $\dfrac{1}{2}$

B. $\dfrac{1}{3}$

C. $\dfrac{2}{3}$

D. $\dfrac{1}{4}$

Answer: A

▶ **Watch Video Solution**

5. In a simultaneous throw of two dice, what is the probability of getting a total of 7? $\frac{1}{6}$ (b) $\frac{1}{4}$ (c) $\frac{2}{3}$ (d) $\frac{3}{4}$

A. $\frac{1}{6}$

B. $\frac{1}{4}$

C. $\frac{2}{3}$

D. $\frac{3}{4}$

Answer: A

▶ Watch Video Solution

6. What is the probability of getting a sum 9 from two throws of a dice ?

A. $\dfrac{1}{6}$

B. $\dfrac{1}{8}$

C. $\dfrac{1}{9}$

D. $\dfrac{1}{12}$

Answer: C

▶ Watch Video Solution

7. In a simultaneous throw of a pair of dice,find the probability of getting.a doublet.

A. $\dfrac{1}{6}$

B. $\dfrac{1}{4}$

C. $\dfrac{2}{3}$

D. $\dfrac{3}{7}$

Answer: A

▶ **Watch Video Solution**

8. In a simultaneous throw of two dice, what is the probability of getting a total of 11?

A. $\dfrac{1}{36}$

B. $\dfrac{1}{6}$

C. $\dfrac{5}{18}$

D. $\dfrac{1}{18}$

Answer: D

▶ **Watch Video Solution**

9. Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even? $\frac{1}{2}$ (b) $\frac{3}{4}$ (c) $\frac{3}{8}$ (d) $\frac{5}{16}$

A. $\dfrac{1}{2}$

B. $\dfrac{3}{4}$

C. $\dfrac{3}{8}$

D. $\dfrac{5}{16}$

Answer: A

▶ Watch Video Solution

10. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn bears a number which is a multiple of 3?

A. $\dfrac{3}{10}$

B. $\dfrac{3}{20}$

C. $\dfrac{2}{5}$

D. $\dfrac{1}{2}$

Answer: A

▶ Watch Video Solution

11. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5? $\frac{1}{2}$ (b) $\frac{2}{5}$ (c) $\frac{8}{15}$ (d) $\frac{9}{20}$

A. $\frac{1}{2}$

B. $\frac{2}{5}$

C. $\frac{8}{15}$

D. $\frac{9}{20}$

Answer: D

12. In a lottery there are 10 prizes and 25 blanks. What is the probability of getting a prize?

A. $\dfrac{1}{10}$

B. $\dfrac{2}{5}$

C. $\dfrac{2}{7}$

D. $\dfrac{5}{7}$

Answer: C

13. One card is drawn at random from pack of cards. What is the probability that the card drawn is a face card?

A. $\dfrac{1}{13}$

B. $\dfrac{3}{13}$

C. $\dfrac{1}{4}$

D. $\dfrac{9}{52}$

Answer: B

14. A card is drawn from a pack of 52 cards. The probability of getting a queen of club or a king of heart is $\frac{1}{13}$ (b) $\frac{2}{13}$ (c) $\frac{1}{26}$ (d) $\frac{1}{52}$

A. $\frac{1}{13}$

B. $\frac{4}{13}$

C. $\frac{1}{26}$

D. $\frac{1}{52}$

Answer: C

15. One card is drawn from a pack of 52 cards. What is the probability that the card drawn is either a red card or a king? $\frac{1}{2}$ (b) $\frac{6}{13}$ (c) $\frac{7}{13}$ (d) $\frac{27}{52}$

A. $\frac{1}{2}$

B. $\frac{6}{13}$

C. $\frac{7}{13}$

D. $\dfrac{27}{52}$

Answer: D

16. From a pack of 52 cards, one card is drawn at random. What is the probability that the card drawn is a ten or a spade? $\dfrac{4}{13}$ (b) $\dfrac{1}{4}$ (c) $\dfrac{1}{13}$ (d) $\dfrac{1}{26}$

A. $\dfrac{4}{13}$

B. $\dfrac{1}{4}$

C. $\dfrac{1}{13}$

D. $\dfrac{1}{26}$

Answer: A

▶ **Watch Video Solution**

17. The probabilty that a card drawn from a pack of 52 cards will be a Diamond or a King is:- (a) 2/13 (b) 4/13 (c) 1/13 (d) 1/52

A. $\dfrac{2}{13}$

B. $\dfrac{4}{13}$

C. $\dfrac{1}{13}$

D. $\dfrac{1}{52}$

Answer: B

▶ **Watch Video Solution**

18. From a pack of 52 cards, two cards are drawn together at random. What is the

probability of both the cards being kings? $\dfrac{1}{15}$

(b) $\dfrac{25}{57}$ (c) $\dfrac{35}{256}$ (d) $\dfrac{1}{221}$

A. $\dfrac{1}{15}$

B. $\dfrac{25}{57}$

C. $\dfrac{35}{256}$

D. $\dfrac{1}{221}$

Answer: D

▶ **Watch Video Solution**

19. Two cards are drawn together from a pack of 52 cards. The probability that one is a spade and one is a heart, is $\dfrac{3}{20}$ (b) $\dfrac{29}{34}$ (c) $\dfrac{47}{100}$ (d) $\dfrac{13}{102}$

A. $\dfrac{3}{20}$

B. $\dfrac{29}{34}$

C. $\dfrac{47}{100}$

D. $\dfrac{13}{102}$

Answer: D

Watch Video Solution

20. A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white?

A. $\dfrac{3}{4}$

B. $\dfrac{4}{7}$

C. $\dfrac{1}{8}$

D. $\dfrac{3}{7}$

Answer: B