

MATHS

BOOKS - RS AGGARWAL MATHS (HINGLISH)

PROBABILITY

Exercise 19A

1. Fill in the blacks:

(i) The probability of an impossible event is

…… .

(ii) The probability of a sure event is …….. .

(iii) For any event E, P(E) + P(not E)=……

.

(iv) The probability of a possible but not a sure event lies between ..... and ..... .

(v) The sum of probabilities of all the outcomes of an experiment is ..... .

Answer: (i) 0 (ii)1(iii)1(iv) 0,1 (v) 1

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2. A coin is tossed once. What is the probaility of getting a tail?

Answer: $\frac{1}{2}$

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3. Two coins are tossed simultaneously. Find the probability of getting

(i) exactly 1 head (ii) at most 1 head (iii) at least 1 head.

Answer: (i) $\frac{1}{2}(ii)\frac{3}{4}(iii)\frac{3}{4}$

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4. A die is thrown once. Find the probability of getting

(i) an even number (ii) a number less than 5

(iii) a number greater than 2 (iv) a number between 3 and 6

(v) a number other than 3 (vi) the number 5 .

Answer:

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

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5. A letter of English alphabet is chosen at random. Determine the probability that the chosen letter is a consonant.

A. 5/26

B. 21/26

C. 7/13

D. 11/26

Answer: B

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6. A child has a die whose 6 faces show the letters given below:



The die is thrown once. What is the probability of getting (i) A,(ii) D?

Answer: $(i)\frac{1}{2}(ii)\frac{1}{6}$

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7. It is known that a box of 200 electric bulbs contains 16 defective bulbs.

One bulb is taken out at random from the

box. What is the probability that the bulb drawn is (i) defective, (ii) nondefective?

Answer: $(i)\frac{2}{25}(ii)\frac{23}{25}$

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8. If the probability of winning a game is 0.7, what is the probability of losing it?

A. 0.3

B. 0.7

C. 0.5

D. 0

Answer: A

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9. There are 35 students in a class of whom 20 are boys and 15 are girls.

From these students one is chosen at random. What is the probability that the chosen student is a (i) boy, (ii) girl?

Answer: $(i)\frac{4}{7}(ii)\frac{3}{7}$

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

Answer: $\frac{2}{7}$

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11. 250 lottery tickets were sold and there are 5 prizes on these tickets. If kunal has

purchased one lottery ticket, what is the probability that he wins a prize?

A. 3/50

B. 1/150

C. 1/50

D. 1/250

Answer: C

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12. 17 cards numbered 1,2,3,4, ….., 17 are put in a box and mixed thoroughly. A card is drawn at random from the box. Find the probability that the card drawn bears (i) an odd number (ii) a number divisible by 5.

Answer: $(i)\frac{9}{17}(ii)\frac{3}{17}$

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13. A game of chance consists of spinning an arrow, which comes to rest pointing at one of the numbers 1,2,3,4,5,6,7,8 and these are

equally likely outcomes. Find the probability that the arrow will point at any factor of 8.

Answer: $\frac{3}{8}$

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14. In a family of 3 children, find the probability of having at least one boy.

Answer: $\frac{7}{8}$

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15. A bag contains 4 white balls, 5 red balls, 2 black balls and 4 green balls. A ball is drawn at random from the bag. Find the probability that it is (i) black, (ii) not green ,(iii) red or white, (iv) neither red nor green.

Answer: $(i)\frac{2}{15}(ii)\frac{11}{15}(iii)\frac{3}{5}(iv)\frac{2}{5}$

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16. A card is drawn at random from a well-shuffled pack of 52 cards.

Find the probability of getting (i) a red king,

(ii) a queen or a jack.

Answer: $(i)\frac{1}{26}(ii)\frac{2}{13}$

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17. A card is drawn at random from a well - shuffled pack of 52 cards. Find the probability that the drawn card is neither a king nor a queen.

Answer: $\frac{11}{13}$

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18. A card is drawn from a well-shuffled pack of 52 cards. Find the probability of getting (i) a red face card (ii) a black king .

Answer: $(i)\frac{3}{26}(ii)\frac{1}{26}$

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19. Two different dice are tossed together. Find the probability that (i) the number on each die is even, (ii) the sum of the numbers

appearing on the two dice is 5.

Answer: $(i)\frac{1}{4}(ii)\frac{1}{9}$

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20. Two different dice are rolled simultaneously. Find the probability that the sum of the numbers on the two dice is 10.

Answer: $\frac{1}{12}$

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21. Two different dice are thrown together. Find the probability that

(i) the sum of the numbers appeared is less than 7.

(ii) the product of the numbers appeared is less than 18.

Answer: $(i)\frac{5}{12}(ii)\frac{13}{18}$

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22. Two dice are rolled together. Find the probability of getting such numbers on two

dice whose product is a perfect square.

Answer: $\frac{2}{9}$

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23. Two dice are rolled together. Find the probability of getting such numbers on the two dice whose product is 12.

Answer: $\frac{1}{9}$

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24. Cards marked with numbers 5 to 50 are placed in a box and mixed thoroughly. A card is drawn from the box at random. Find the probability that the number on the taken out card is (i) a prime number less than 10 (ii) a number which is a perfect square.

Answer: $(i)\frac{1}{23}(ii)\frac{5}{46}$

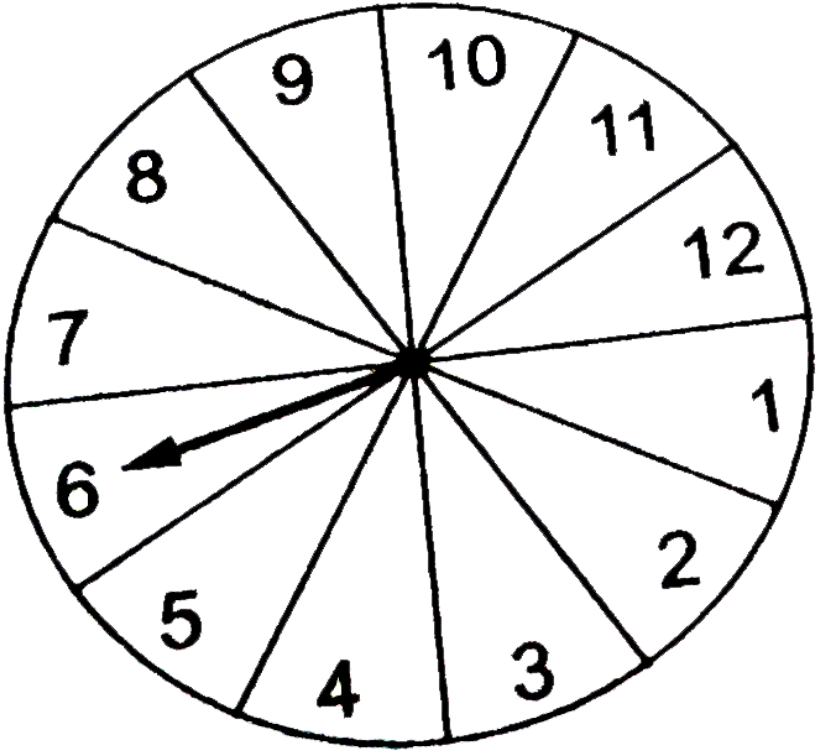
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25. a game of chance consists of spinning an arrow which is equally likely to come to rest

pointing to one of the numbers 1,2,3,….,12 as shown in the figure. What is the probability that it will point to

(i) 6? (ii) an even numbers?

(iii) a prime number? (iv) a number which is a multiple of 5?



Answer: $(i)\frac{1}{12}(ii)\frac{1}{2}(iii)\frac{5}{12}(iv)\frac{1}{6}$

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26. 12 defective pens are accidently mixed with 132 good ones. It is not possible to just

look at pen and tell whether or not it is defective. One pen is taken out at random from this lot. Find the probability tht the pen taken out is good one.

Answer: $\frac{11}{12}$

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27. A lot consists of 144 ballpoint pens of which 20 are defective and others good. Tanvy will buy a pen if it is good, but will not buy it if is defective. The shopkeeper draws

one pen at random and gives it to her.

What is the probability that (i) she will buy it, (ii) she will not buy it?

Answer: $(i)\frac{31}{36}(ii)\frac{5}{36}$

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28. 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 (i) a two -digit number, (ii) a perfect square numbes, (iii) a number

divisible by 5.

Answer: $(i)\frac{9}{10}(ii)\frac{1}{10}(iii)\frac{1}{5}$

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29. (i) A lot of 20 bulbs contain 4 defective ones. One bulb is drawn at random from the lot. What is the probability that this bulb is defective?

(ii) Suppose the bulb drawn in (i) in not defective and not replaced. Now, bulb is drawn at random from the rest. What is the

probability that this bulb is not defective ?

Answer: $(i)\frac{1}{5}(ii)\frac{15}{19}$

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30. a bag contains lemon- flavoured candies only. Hema takes out one condy without looking into the bag. What is the probability that she takes out (i) an orange-flavoured candy? (ii) a lemon-flavoured candy?

Answer: $(i)0(ii)1$

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31. There are 40 students in a class of whom 25 are girls and 15 are boys. The class teacher has to select one student as a class representative.

He writes the name of each studen on a separate card, the cards being identical. Then she puts cards in a bag and stirs them thoroughly. She then draws one card from the bag. What is the probability thet the name written on the card is the name of (i) a girl?

(ii) a boy?

Answer: $(i)\frac{5}{8}(ii)\frac{3}{8}$

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32. One card is drawn from a well-shuffled deck of 52 cards. Find the the probability of drawing an ace is

A. 3/13

B. 2/13

C. 4/13

D. 1/13

Answer: D

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33. A card is drawn at random from a well - shuffled deck of 52 cards. Find the probability of getting

(i) a queen (ii) a diamond

(iii) a king or an ace (iv) a red ace.

Answer: $(i)\frac{1}{13}(ii)\frac{1}{4}(iii)\frac{2}{13}(iv)\frac{1}{26}$

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34. One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting

(i) a king of red suit (ii) a face card

(iii) a red face card (iv) a queen of black suit

(v) a jack of hearts

Answer:

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

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35. A card is drawn at random from a well-shuffled deck of playing cards.

Find the probability that the card drawn is

(i) a card of spades or an ace (ii) a red king

(iii) either a king or a queen (iv) neither a king nor a queen.

Answer: $(i)\frac{4}{13}(ii)\frac{1}{26}(iii)\frac{2}{13}(iv)\frac{11}{13}$

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36. Two different dice are thrown together. Find the probability that the numbers

obtained have

(i) even sum (ii) even product.

Answer: $(i)\frac{1}{2}(ii)\frac{3}{4}$

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37. Two different dice are thrown together. Find the probability that the numbers obtained

(i) have a sum less than 7 (ii) have a product less than 16

(iii) is a doublet of odd numbers.

Answer: $(i)\frac{5}{12}(ii)\frac{25}{36}(iii)\frac{1}{4}$

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38. The king, the jack and the 10 of spades are lost from a pack of 52 cards and a card is drawn from the remaining cards after shuffling. Find the probability of getting a

(i) red card (ii) black jack

(iii) red king (iv) 10 of hearts.

Answer: $(i)\frac{26}{49}(ii)\frac{1}{49}(iii)\frac{2}{49}(iv)\frac{1}{49}$

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39. Peter throws two different dice together and finds the product of the two numbers obtained. Rina throws a die and squares the number obtained. Who has the better chance to get the number 25?

Answer: Rina

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Exercise 19B

1. A box contains 25 cards numbered from 1 to 25. A card is drawn at random from the bag. Find the probability that the number on the drawn card is (i) divisible by 2 or 3, (ii) a prime number.

Answer: $(1)\frac{16}{25}(ii)\frac{9}{25}$

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2. A box contains cards numbered 3,5,7,9,…,35,37. A card is drawn at random

from the box. Find the probability that the number on the card is a prime number.

Answer: $\frac{11}{18}$

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3. Cards numbered 1 to 30 are put in a bag. A card is drawn at random from the bag. Find the probability that the number on the drawn card is (i) not divisible by 3, (ii) a prime number greater that 7, (iii) not a perfect

square number.

Answer: $(i)\frac{2}{3}(ii)\frac{1}{5}(iii)\frac{5}{6}$

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4. Cards bearing numbers 1,2,5,….,35 are kept in a bag. A card is drawn at random from the bag. Find the probability of getting a card bearing (i) a prime number less than 15, (ii) a number divisible by 3 and 5.

Answer: $(i)\frac{5}{18}(ii)\frac{1}{9}$

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5. A box contains cards bearing numbers 6 to 70. If one card is frawn at random from the box, find the probability that it bears (i) a one-digit number, (ii) a number divisible by 5, (iii) an odd number less than 30, (iv) a composite number between 50 and 70.

Answer: $(i)\frac{4}{65}(ii)\frac{1}{5}(iii)\frac{12}{65}(iv)\frac{3}{25}$

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6. Cards marked with numbers 1,3,5,…101 are placed in a bag and mixed thoroughly. A card is drawn at random from the bag. Find the probability that a number on the drawn card is (i) less than 19, (ii) a prime number less than 20.

Answer: $(i)\frac{3}{17}(ii)\frac{7}{51}$

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7. Tickets numbered 2,3,4,5,…,100,101 are placed in a box and mixed thoroughly. One

ticket is drawn at random from the box. Find the probability that the number on the ticket is

(i) an even number

(ii) a number less than 16

(iii) a number which is a perfect square

(iv) a prime number less than 40.

Answer: $(i)\frac{1}{2}(ii)\frac{7}{50}(iii)\frac{9}{100}(iv)\frac{3}{25}$

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8. (i) A box contins 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 perfect square number.

(ii) A box contains 90 discs which are numbered 1to 90. If one disc is drawn at random from the box , find the probability that it bears (a) a two-digit number (b) a number divisible by 5

Answer: $(i)\frac{1}{10}(ii)(a)\frac{9}{10}(b)\frac{1}{5}$

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9. A piggy bank contains hundred 50p coins, fifty Rs. 1 coins, twenty ? 2 coins and ten Rs. 5 coins. If it is equally likely that one of the coins will fall out when the bank is turned upside down, what is the probability that the coin (i) will be a

Answer: $(i)\frac{7}{25}(ii)\frac{22}{25}(iii)\frac{3}{5}$

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10. The probability of selecting a red ball at random from a jar that contains only red, blue

and orange balls is $\frac{1}{4}$. The probability of selecting a blue ball at random from the same jar is $\frac{1}{3}$. If the jar contains 10 orange balls, find the total number in the jar.

Answer: 24

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11. A bag contains 18 balls out of which x balls are red.

(i) If one balls is drawn at random from the bag, what is the probability that it is not red?

(ii) If two more red balls are put in the bag, the probability of drawing a red ball will be $\frac{9}{8}$ times the probabability of drawing a red ball in the first case. Find the value of x.

Answer: $(i)\frac{(18-x)}{18}(ii)x=8$

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12. A jar contains 24 marbles. Some of these are green and others are blue. If a marble is drawn at random from the jar, the probability that it is green is $\frac{2}{3}$. Find the number of blue

marbles in the jar.

Answer: 8

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13. A jar contains 54 marbles each of which is blue, green or white. The probability of selecting a blue marble at random from the jar is $\frac{1}{3}$, and the probability of selecting a green marble at random is $\frac{4}{9}$. How many white marbles does the jar contain?

Answer: 12

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14. A carton consists of 100 shirts of which 88 are good and 8 have minor defects. Rohit, a trader, will only accept the shirts which are good, But, Kamal, an another trader, will only reject the shirts which have major defects. One shirt is drawn at random from the carton. What is the probability that is acceptable to (i) Rohit and (ii) Kamal?

Answer: $(i)\frac{22}{25}(ii)\frac{24}{25}$

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15. A group of 12 persons, of which 3 are extremely patient, other 6 are extremely honest and rest are extremely kind. A person from the group is selected at random. Assuming that each person is equally likely to be selected, find the probability of selecting a person who is (i) extremely patient,(ii) extremely kind or honest. Which of the above values you prefer more?

Answer: $(i)\frac{1}{4}(ii)\frac{3}{4}$

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16. A die is relled twice. Find the probability that 5 will come up both the times.

A. 5/6

B. 1/16

C. 1/36

D. 1/6

Answer: C

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17. Two dice are rolled once. Find the probability of getting such numbers on two dice whose product is a perfect square.

Answer: $\frac{2}{9}$

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18. A letter is chosen at random from the letters of the word 'ASSOCIATION'.

Find the probability that the chosen letter is a

(i) vowel (ii) consonant (iii) an S.

Answer: $(i)\frac{6}{11}(ii)\frac{5}{11}(iii)\frac{2}{11}$

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19. Five cards- the tan, jack, queen, king and ace of diamonds are well shuffled with their faces downwards. One card is then picked up at random. (a) What is the probability that the drawn card is the queen?

(b) If the queen is drawn and put aside and a second card is drawn, find the probability that

the second card is (i) an ace, (ii) queen .

Answer: $(a)\frac{1}{5}(b)(i)\frac{1}{4}(ii)0$

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20. A card is drawn at random from a well shuffled pack of 52 cards. Find the probability that the card drawn is neither a red card nor a queen.

Answer: $\frac{6}{13}$

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21. What is the probability that on ordinary year has 53 Mondays?

Answer: $\frac{1}{7}$

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22. All red face cards are removed from a pack of playing cards. The remaining cards are well shuffled and then a card is drawn at random from then. Find the probability that the drawn card is a red card (ii) a face card

and (iii) a card of clubs.

Answer: $(i)\frac{10}{23}(ii)\frac{3}{23}(iii)\frac{6}{23}$

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23. All kings, queens are aces are removed from a pack of 52 cards. The remaining cards are well shuffled and then a card is drawn from it. Find the probability that the drawn card is : a black face card (b) a red card.

Answer: $(i)\frac{1}{20}(ii)\frac{1}{2}$

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24. A game consists of tossing a one-rupee coin three times, and noting its outcomee each time. Find the probability of getting (i) three heads, (ii) at least 2 tails.

Answer: $(i)\frac{1}{8}(ii)\frac{1}{2}$

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25. Find the probability that a leap year selected at random will contain 53 Sundays.

Answer: $\frac{2}{7}$

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26. The probability of selecting a rotten apple randomly from a heap of 900 apples is 0.18. What is the number of rotten apples in the heap?

Answer: 162

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27. A bag contains 15 white and some black balls. If the probability of drawing a black ball from the bag is thrice that of drawing a white ball find the number of black balls in the bag.

Answer: 45

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28. Find the probability of getting the sum of two numbers, less than 3 or more than 11, when a pair of distinct dice is thrown

together.

Answer: $\frac{1}{18}$

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Multiple Choice Questions (Mcq)

1. If P(A) denotes the probability of an event,

then

Answer: C

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2. If the probability of occurrence of an event is p then the probability of non-happening of this event is

Answer: B

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3. What is the probability of an impossible event?

Answer: B

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4. What is the probability of a sure event?

Answer: C

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5. Which of the following cannot be the probability of an event?

Answer: A

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6. A number is selected at random from the numbers 1 to 30. What is the probability that the selected number is a prime number?

Answer: C

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7. The probability that number selected at random from the numbers 1,2,3,…,15 is a multiple of 4, is

Answer: C

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8. A box contains cards numbered 6 to 50. card is drawn at random from the box. The probability that the drawn card has a number which is a perfect square is

Answer: D

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9. A box contains 90 discs, numbered from 1 to 90. If one disc is drawn at random from the box, the probability that it bears prime

number less than 23 is

Answer: C

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10. Cards bearing numbers 2,3,4,…11 are kept in a bag. A card is drawn at random from the bag. The probability of getting a card with a prime number is

Answer: A

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11. One ticket is drawn at random from a bag containing tickets numbered 1 to 40. The probability that the selected has a number, which is a multiple of 7, is

Answer: B

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12. Which of the following cannot be the probability of an event?

Answer: D

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13. If the probability of winning a game is 0.4 then the probability of losing it, is

A. 0.4

B. 0.5

C. 0.6

D. 1

Answer: C

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14. If an event cannot occur, then its propbability is

A. -1

B. 1

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

D. 0

Answer: D

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15. There are 20 tickets numbered as 1,2,3,…,20 respectively. One ticket is drawn at random. What is the probability that the number on the ticket drawn is a multiple of 5?

Answer: B

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16. There are 25 tickets numbered as 1,2,3,4,…,25 respectively. One ticket is drawn at random. What is the probability that

the number on the ticket is a multiple of 3 or 5?

A. $\frac{13}{25}$

B. $\frac{11}{25}$

C. $\frac{12}{25}$

D. $\frac{9}{25}$

Answer: C

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17. Cards, each marked with one of the numbers 6,7,8,…,15, are placed in a box and mixed thoroughly. One card is drawn at random from the box. What is the probability of getting a card with number less than 10?

A. $\frac{4}{5}$

B. $\frac{3}{5}$

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

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

Answer: D

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18. A die is thrown once. The probability of getting an even numbers is

Answer: A

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19. The probability of throwing a number greater than 2 with a fair die is

Answer: D

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20. A die is thrown once. The probability of getting an odd number greater than 3 is

Answer: B

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21. A die it thrown once. What is the probability of getting a prime number?

Answer: C

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22. Two dice are thrown at the same time. Find the probability of getting

(i) Same number on both dice.

(ii) different number of both dice.

Answer: C

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23. The probability of getting 2 heads, when two coins are tossed, is

Answer: D

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24. Two dice are thrown together. What is the probability of getting a doublet?

Answer: B

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25. Two unbiased coins are tossed simultaneously. Find the probability of getting two head (ii) one head one tail (iv) at least

one head at most one head (vi) no head

Answer: D

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26. Three unbiased coins are tossed simultaneously. Find the probability of getting (i) exactly two heads, (ii) at least two heads, (iii) at most 2 heads.

Answer: C

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27. In a lottery , there are 8 prizes and 16 blanks. What is the probability of getting a prize?

Answer: B

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28. In a lottery, there are 6 prizes and 24 blanks. What is the probability of not getting a prize?

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

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

C. $\frac{4}{5}$

D. $\frac{3}{5}$

Answer: C

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29. A box contains 3 blue, 2 white and 4 red marbles. If a marble is drawn at random from the box, what is the probability that it will not

be a white marble?

Answer: C

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30. A bag contains 4 red and 6 black balls. A ball is taken out of the bag at random What is the probability of getting a black ball?

Answer: B

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31. A bag contains 8 red, 2 black and 5 white balls. One ball is drawn at random. What is the probability that the ball drawn is not black?

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

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

C. $\frac{13}{15}$

D. $\frac{2}{15}$

Answer: C

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32. A bag contains 3 white, 4 red and 5 black balls. One ball is drawn at random. What is the probability that the ball drawn is neither balck nor white?

Answer: C

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33. A card is drawn at random from a well - shuffled deck of 52 playing cards. Find the probability that the card drawn is : (i) either a

spade or an ace (ii) a black king

Answer: B

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34. From a well-shuffled deck of 52 cards, one card is drawn at random.

What is the probability of getting a queen?

Answer: A

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35. One card is drawn from a well shuffled deck of 52 cards. Find the probability of getting: (i) a king of red suit (ii) a face card (iii) a red face card

Answer: C

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36. One card is drawn at random from a well-shuffled deck of 52 cards.

What is the probability of getting a black face

card?

Answer: B

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37. One card is drawn at random from a well-shuffled deck of 52 cards.

What is the probability of getting a 6?

Answer: C

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Solved Examples

1. A coin is tossed once. What is the probaility of getting a head ?

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2. A die it thrown once. What is the probability of getting a prime number?

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3. An unbiased die is thrown. What is probability of getting : (i) An even number (ii) An odd number (iii) A multiple of 3 (iv) a number 3 or 4 (v) an even number and multiple of 3 (vi) a number between 3 and 6 (vii) A number greater than 3 (viii) A number less than 4

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4. A die is thrown once. Find the probability of getting a multiple of 3.

A. 1/6

B. 1/2

C. 1

D. 1/3

Answer: D

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

A. 1/4

B. 1/2

C. 3/4

D. 3/8

Answer: C

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6. Three unbiased coins are tossed simultaneously. Find the probability of getting at most 2 heads.

A. $\frac{1}{8}$

B. $\frac{7}{8}$

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

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

Answer: B

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7. Cards numbered from 11 to 60 are kept in a box. If a card is drawn at random from the box, find the probability that the number on

the drawn cards is (i) an odd number (ii) a perfect square number (iii) divisible by 5. (iv) a prime number less than 20.

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8. A box contains 100 red cards, 200 yellow cards and 50 blue cards. If a card is drawn at random from the box, then find the probability that it will be (i) a blue card (ii) not a yellow card (iii) neither yellow nor a blue card.

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9. A bag contains 6 red balls and some blue balls. If the probability of drawing a blue ball from the bag is twice that of a red ball, find the number of blue balls in the bag.

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10. A bag contains white, black and red balls only. A ball is drawn at random from the bag. If the probability of getting a white ball is $\frac{3}{10}$

and that of a black bail is $\frac{2}{5}$. find the total number of balls if number of red balls is 15.

A. 40

B. 60

C. 50

D. 30

Answer: C

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11. Two different dice are rolled together. Find the probability of getting a doublet.

A. 1/6

B. 1/2

C. 3/4

D. 5/6

Answer: A

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12. Two dice are thrown at the same time and the product of numbers appearing on them is noted. Find the probability that the product is less than 9.

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13. A piggy bank contains hundred 50 paise coins, fifty Rs. 1 coins, twenty Rs. 2 coins and ten Rs. 5 coins. If it is equally likely that one of the coins will fall out when the bank is turned upside down, find the probability that

the coin which fell will be a 50 paise win will be of value more than Rs. 1 will be of value less than Rs. 5 will be a Rs. 1 or Rs. 2 coin.

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14. A game consists of tossing a one-rupee coin three times and noting its outcome each time. Hanif wins if all the tosses give the same result, i.e., three heads or three tails and loses otherwise. Calculate the probability that Hanif will lose the game.

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15. One card is drawn at random from a well - shuffled deck of 52 cards.

Find the probability that the card drawn is (i) a king, (ii) a red eight, (iii) a spade, (iv) a red card, (v) the six of the clubs and (vi) a face card.

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16. One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting a red face card.

A. 1/52

B. 3/26

C. 1/26

D. 1/13

Answer: B

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17. A card is drawn at random from a well-shuffled deck of 52 playing cards. Find the probability that the card drawn is (i) a card of spades or an ace, (ii) a black king, (iii) neither a jack nor a king, (iv) either a king or a queen.

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18. One card is drawn at random from a well-shuffled deck of 52 plagying cards. Find the

probability that the card drawn is neither a red card nor a queen.

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

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

C. $\frac{5}{13}$

D. $\frac{8}{13}$

Answer: B

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19. From a pack of 52 playing cards jacks, queens, kings and aces of red colour are removed. From the remaining, a card is drawn at random.

Find the probability that the card drawn is

(i) a black queen (ii) a red card (iii) a ten

(iv) a picture card (jacks, queen and kings are picture cards).

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20. All the black face cards are removed from a pack of 52 playing cards.

The remaining cards are well shuffled and then a card is drawn at random. Find the probability of getting a (i) face card, (ii) red card, (iii) black card, (iv) king.

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21. Red queens and black jacks are removed from a pack of 52 playing cards. A card is drawn at random from the remaining cards,

after reshuffling them. Find the probability that the drawn card is a face card

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

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

C. $\frac{4}{5}$

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

Answer: D

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