MATHEMATICS

PROBABILITY

In a cricket match probability of winning of India against Pakistan is 0.79. Then probability of loosing the match will be@0.23@0.21@0.14@0.36@ B

Probability that a non leap year should have 53 Mondays, will be@2/7@3/7@1/7@5/7@C

A number is chosen randomly among the first 100 natural numbers. Then the probability that the number chosen is multiple of 7, will be@7/50@7/15@7/29@3/13@ A

A bag contains 10 red balls and some white balls. If the probability of drawing a white ball is double that of a red ball, then number of white balls in the bag will be@10@15@20@ 25@ C

Each outcome of a sample space related to any random experiment is known as@compound event@elementary event@sure event@impossible event@ B

The king, queen and jack of hearts are removed from a deck of 52 playing cards and then well shuffled. One card is selected from the remaining cards. Then the probability of getting a king is @1/49@2/49@3/49@1.@C

12 defective pens are academically mixed with 132 good ones. It is not possible to just look at a pen and tell whether or not it is defective. One pen is taken out at random from this lot. Determine the probability that the pen taken out is a good one.@11/12@1/12@10/12@ 1/4.@ A

17 cards numbered 1, 2, 3, …. 16, 17 are put in a box and mixed thoroughly. One person draws a card from the box. Then the probability that the odd number on the card is@ 8/17@ 9/17@ 6/17@ 5/17@ B

Two coins are tossed simultaneously. Then the probability of getting at list one head is @ 1/4@ 1@ 3/4@0.@ C

A die is thrown twice. Then the probability that 5 will come up at least once is@11/36@7/36@ 5/36@0.@ A

Ina single throw of two dice, then the probability of getting a doublet of odd numbers is@ 11/12@ 1/12@ 5/12@ 5/6.@B

If the probability of wining a game is 0.7, then the probability of losing a game is@ 1/10@ 9/10@ 1@ 3/10.@D

A bag contains 5 white balls and some red balls. If the probability of drawing a red ball is double that of a white ball, then the number of red balls in the bag is@7@8@10@9.@ C

A card is drawn at random from a well shuffled pack of 52 cards. Then the probability that the card is neither a red card nor a queen is@ 6/13@ 5/13@ 11/13@ 4/13.@A

There are 30 cards of the same size in a bag on which numbers 1 to 30 are written. One card is taken out of the bag at random. Then the probability that the number on the number on the selected card is not divisible by 3 is@ 1/3@ 3/4@ 2/3@ 1/4.@C

If there coins are tossed simultaneously, then the probability of getting at least two heads, is@1/4@ 3/8@1/2@1/4@ C

A bag contains three green marbles four blue marbles, and two orange marbles. If marble is picked at random, then the probability that it is not a orange marble is@1/4@1/3@4/9@7/9@ D

A number is selected from number 1 to 27. The probability that it is prime is@2/3@1/6@1/3@2/9@C

IF (P)(E) = 0.05, then P (not E) = @-0.05@0.5@0.9@0.95@ D

A bulb is taken out at random from a box of 600 electric bulbs that contains 12 defective bulbs. Then the probability of a non-defective bulb is@0.02@0.98@0.50@None@ B

Hence, we have a tree diagram as shown 1.The probability of raining on day 1 is 0.2 and on day 2 is 0.3. What is the probability of raining on both the days?@0.2@0.1@0.06@0.25@ D

A bag contains 5 red balls and 8 balls. It also contains 4 green and 7 black balls. If a ball is drawn at random, then find the probability that is not green.@5/6@1/4@1/6@7/4@A

A bag contains 2 red, 3 green and 2 blue balls. 2 balls are to be drawn randomly. What is the probability that the balls drawn contain no blue ball?@5/7@10/21@2/7@11/21@ A

If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@NONE@ B

Suppose six coins are flipped. Then the probability of getting at least one tail is -@71/72@53/54@63/64@1/12@ C

26. The probability that a student is not a swimmer is 1/5. Then the probability that out of the five students, four are swimmers, is –

@ ${}^5C_2\left(\frac{4}{5}\right)^2\left(\frac{1}{5}\right)$ @ $\left(\frac{4}{5}\right)^4\left(\frac{1}{5}\right)$ @ ${}^5C_1\left(\frac{1}{5}\right)\left(\frac{4}{5}\right)^4$ @ NONE OF THESE@ B

27.A set A is containing n elements. A subset P of A is chosen at random. The set is reconstructed by replacing the elements of P. A subset of A is again chosen at random. The probability that P and Q have no common element is -@ 5^N@ $\left(\frac{3}{4}\right)^n$ @ $\left(\frac{3}{5}\right)^n$ @ 2^N@ A

28.If events A and B are independent and P@ = 0.15, P(A ∪ B) = 0.45, then P@ =_____ @6/13@6/17@6/19@6/23@ B

One hundered identical coins each with probability p of showing up heads are tossed. If $0 < p < 1$ and the probability of heads showing on 50 coins is equal to that of heads on 51 coins; then the value of p is -@1/2@49/101@50/101@51/101@ D

30.The probability that Kumar will hit a target is given as 1/5. Then, his probability of atleast one hit in 10 shots is -@ $\frac{1}{6^{10}}$ @ $1-\left(\frac{4}{5}\right)^{10}$ @ $1-\frac{1}{5^{10}}$ @ $1-\frac{1}{5^{19}}$ @ B

Two dice are tossed. The probability that the total score is a prime number is -@1/6@5/12@1/2@7/9@ B

If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@ NONE@ B

Hence, we have a tree diagram as shown 1.The probability of raining on day 1 is 0.2 and on day 2 is 0.3. What is the probability of raining on both the days?@0.2@0.1@0.06@ 0.25@ D

A bag contains 5 red balls and 8 balls. It also contains 4 green and 7 black balls. If a ball is drawn at random, then find the probability that is not green.@5/6@1/4@1/6@ 7/4@ A

A bag contains 2 red, 3 green and 2 blue balls. 2 balls are to be drawn randomly. What is the probability that the balls drawn contain no blue ball?@5/7@10/21@2/7@11/21@ A

If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@ None@ B

Suppose six coins are flipped. Then the probability of getting at least one tail is -@71/72@53/54@63/64@1/12@ C

38.The probability that a student is not a swimmer is 1/5. Then the probability that out of the five students, four are swimmers, is -@ ${}^5C_2\left(\frac{4}{5}\right)^2\left(\frac{1}{5}\right)$@ $\left(\frac{4}{5}\right)^4\left(\frac{1}{5}\right)$@ ${}^5C_1\left(\frac{1}{5}\right)\left(\frac{4}{5}\right)^4$@ None of these@B

39.A set A is containing n elements. A subset P of A is chosen at random. The set is reconstructed by replacing the elements of P. A subset of A is again chosen at random. The probability that P and Q have no common element is -@ 5^N@ $\left(\frac{3}{4}\right)^n$ @ $\left(\frac{3}{5}\right)^n$ @ 2^N@ A

If events A and B are independent and P@ = 0.15, P(A ∪ B) = 0.45, then P@ = _____@6/13@6/17@6/19@6/23@ B

One hundered identical coins each with probability p of showing up heads are tossed. If 0 < p < 1 and the probability of heads showing on 50 coins is equal to that of heads on 51 coins; then the value of p is -@1/2@49/101@50/101@51/101@ D

42.The probability that Kumar will hit a target is given as 1/5. Then, his probability of atleast one hit in 10 shots is -@ $\frac{1}{6^{10}}$@ $1-\left(\frac{4}{5}\right)^{10}$ @ $1-\frac{1}{5^{10}}$@ $1-\frac{1}{5^{19}}$@ B

Two dice are tossed. The probability that the total score is a prime number is -@1/6@5/12@1/2@7/9@ B

If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@ None@ B

Four different objects 1, 2, 3, 4 are distributed at random in four places marked 1, 2, 3, 4. What is the probability that none of the objects occupy the place corresponding to its number?@17/24@3/8@1/2@ 5/8@ C

Three students try to solve a problem independently with a probability of solving it as 1/3, 2/5, 5/12 respectively. What is the probability that the problem is solved?@1/18@12/30@23/30@1/2@ C

If the probability of rain on any given day in Pune city is 50%, then what is the probability that it rains on exactly 3 days in a 5-day period?@8/125@5/16@8/25@2/25@ B

The probability that an even A happens in one trial of an experiment is 0.4. Three independent trials of the experiment are formed. The probability that the even A happens at least once is -@0.934@0.784@0.548@0.343@ B

A number is chosen at random among the first 120 natural numbers. The probability of the number chosen being a multiple of 5 or 15 is -@1/5@1/6@1/7@ 1/9@ A

From a pack of 52 playing cards, two cards are drawn together at random. Calculate the probability of both the cards being Kinds -@1/15@25/57@35/256@NONE@ D

What is the possibility of getting at least 6 heads if eight coins are tossed simultaneously?@ 37/256@25/57@1/13@NONE@ A

In a bag containing three balls, a white ball was placed, and then one ball was taken out at random. What is the probability that the extracted ball would turn out ot be white, if all

possible hypothesis concerning the colour of the balls that were initially in the bag were equally possible?@5/8@3/4@1/2@3/8@ A

53.From a box containing 60 standard and 40 substandard articles, two articles are chosen at random. What is the probability that one of them is standard and the other substandard?@ $\frac{60}{100}\times\frac{40}{100}$ @ $\frac{60}{100}\times\frac{39}{100}$@16/33@24%@ C

From a normal pack of cards, a card is drawn at random. The probability of getting a jack or a king is -@5/52@1/52@2/13@NONE@ C

Two numbers are chosen from 1 to 5. The probability for the two numbers to be consecutive is -@1/5@2/5@1/10@2/10@ B

Two dice are thrown at a time. The probability that the difference of the numbers shown on the dice is 1 is -@5/18@1/36@1/6@NONE@ A

A bag contains 3 white and 5 red balls. If a ball is drawn at random, the probability that the drawn ball to be red is -@3/8@5/8@3/15@5/15@ B

The probability of getting an even number when a dice is rolled is -@1/6@1/36@1/2@ none@C

A card is drawn from a packet of 100 cards numbered 1 to 100. The probability of drawing a number which is a square is -@1/10@9/100@1/100@2/100@ A

The probability for a randomly selected number out of 1, 2, 3, 4, ..., 25 to be a prime number is -@2/25@23/25@10/25@9/25@ D

In a single throw of two dice, the probability of getting a sum of 10 is -@1/12@1/36@1/6@ none A

Three letters, to each of which corresponds an addressed envelope are placed in the envelopes at random. The probability that all letters are placed in the right envelopes in -@1/3@1@1/6@0@ C

In simultaneous throws of coin and dic, what is the probability of getting head on coin and prime number on dice?@1/4@1/2@3/4@1/3@ A

A bag contains 40 balls out of which some are red, some are blue and remaining are black. If the probability of drawing a red ball is and that of blue ball is , then the number of black balls is@5@25@10@30@ C

In a simultaneous throw of two dice, what is the probability of getting a total of 10 or 11?@7/12@5/36@1/6@1/4@ B

If E and F be events in a sample space such that P(E $\cup$ F) = 0.8, P (E $\cap$ F) = 0.3 and P(E) = 0.5,then P(F) is @0.6@1@0.8@None @ A

Two numbers are selected from the set of integers 1 to 25. What is the probability that the product of the numbers will be 36?@1/200@1/100@1/50@1/75@ B

If E and F be mutually exclusive events such that P(E) = 0.4 and P(F) = 0.5, then P(E $\cup$ F) is :@0.2@0.1@0.9@None@ C

Two cards are drawn from a pack of cards one after another so that the first card is replaced before drawing the second card. What is the probability that the first card is an ace and the second is a number card?@9/169@1/52@1/4@17/52@ A

Two numbers 'a' and 'b' are selected (successively without replacement in that order) from the integers 1 to 10. What is the probability that will be an integer?@17/90@1/5@19/90@8/45@ A

A four digit number is formed by using the digits 1, 2, 5, 6 and 8 without repetition. What is the probability that it will be an even number?@3/5@2/5@1/2@3/10@ A

A man's packet has seven M1 coins, three M2 coins and four M5 coins. If two coins are selected simultaneously, what is the probability of yielding the minimum amount?@3/13@6/13@3/26@6/43@ A

Find the probability that a leap year selected at random will contain 53 Sundays.@5/7@3/4@4/7@2/7@D

A point (a, b) in the plane is such that $|a| \leq 4$, $|b| \leq 4$, where a, b are integers, then what is the probability that the distance of point from origin is at most two units?@13/81@15/81@11/81@13/64@A

If one number is selected from the first 70 natural numbers, the probability that the number is a solution of x² + 2x > 3 is@69/70@1/70@1@0@ A

A number is selected from the set {1, 2, 3, 4, 5, 6, 7, 8}. What is the probability that it will be a root of the equations x²– 6x + 8 = 0?@1/3@2/3@3/4@1/4@D

A four-digit number is formed by using the digits 1, 2, 4, 8 and 9 without repetition. If one number is selected from those numbers, then what is the probability that it will be an odd number? @1/5@2/5@3/5@4/5@B

A bag contains 40 balls out of which some are red some are blue and remaining are black. If the probability of drawing a red ball is and that of blue ball is , then the number of black balls is @5@25@10@30@C

If E and F be mutually exclusive events such that P(E) = 0.4 and P(F) = 0.5, then $P(E \cup F)$ is @0.2@0.1@0.9@None@C

A number x is chosen at random from the numbers –3, –2, –1, 0, 1, 2, 3. The probability that $|x| < 2$ is @5/7@3/7@2/7@1/7@B

What is the probability of getting a king or a queen in a single draw from a pack of 52 cards?@1/26@1/13@2/13@ None @C

Two fair coins are tossed simultaneously. Find the probability of Getting only one head@1/2@ 3/4@2/3@3/4@ A

Two fair coins are tossed simultaneously. Find the probability of Getting two heads@1/4@3/4@1/2@3/8@ B

Two fair coins are tossed simultaneously. Find the probability of Getting at least twoheads@7/2@1/4@1/2@4/5@ B

Two fair coins are tossed simultaneously. Find the probability of Getting at least two heads@3/4@1/2@1/4@1@ C

Three fair coins are tossed simultaneously. Find the probability of Getting one head@0@3/4@5/8@3/8@ D

Three fair coins are tossed simultaneously. Find the probability of Getting one tail@ 1@1/4@5/8@3/8@ D

Three fair coins are tossed simultaneously. Find the probability of Getting at least one heads@7/8@1/8@3/4@1/4@ A

Three fair coins are tossed simultaneously. Find the probability of Getting two heads@3/5@3/8@5/8@2/5@ B

Three fair coins are tossed simultaneously. Find the probability of Getting two heads@3/8@7/8@1/2@1/4@ C

Three fair coins are tossed simultaneously. Find the probability of Getting atleast one head and one tail@2/8@1/2@3/10@4/3@ D

Three fair coins are tossed simultaneously. Find the probability of Getting more heads than the number of tails@2@7/8@5/8@1/2@ D

Three fair coins are tossed simultaneously. Find the probability of Getting a number less than 7 but greater than 0@ 0@3/4@ 1@7/8@ C

Three fair coins are tossed simultaneously. Find the probability of Getting a multiple of 3.@1/6@1/3@5/6@ None of these@ B

Three fair coins are tossed simultaneously. Find the probability of Getting a prime number@1/2@3/5@5/7@5/8@ A

Three fair coins are tossed simultaneously. Find the probability of Getting an even number@1/2@4/5@5/7@5/8@ A

A coin is tossed successively three times. Find the probability of Getting exactly one head or two heads.@1/4@3/4@1/2@3/8@ B

A coin is tossed successively three times. Find the probability of Getting no heads.@ 0@ 1@1/8@7/8@ C

Find the probability of getting a head in a throw of a coin.@1/2@ 1@2@None of these@ A

If A be the event such that P@=2/5, then P(not A) is equal to@3/5@4/5@1/5@ None of these @A