MATHS

BOOKS - SURA MATHS (TAMIL ENGLISH)

PROBABILITY

Exercise 9 1

1. You are walking along a street. If you just choose a stranger crossing you, what is the porbability that his next birthday will fall on a Sunday ?

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2. What is the probability of drawing a King or a Queen or a Jack from a deck of cards ?

3. What is the probability of throwing an even number with a single standard dice of six faces ?

4. There are 24 balls in a pot. If 3 of them are Red, 5 of them are Blue and the remaining are Green then, what is the probability of picking out (i) a Blue ball, (ii) a Red ball and (iii) a Green ball ?

5. When two coins are tossed, what is the probability that two heads are obtained?

6. Two dice are rolled, find the probability that the sum is

(i) equal to 1 (ii) equal to 4 (iii) less than 13

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7. A manufacturer tested 7000 LED lights at random and found that 25 of them were defective . If a LED light is selected at random, what is the probability that the selected LED ligtht is a defective one .

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8. In a football match, a goalkeeper of a team can stop the goal, 32 times out of 40 attempts tried by a team. Find the probability that the opponent team can convert the attempt into a goal .
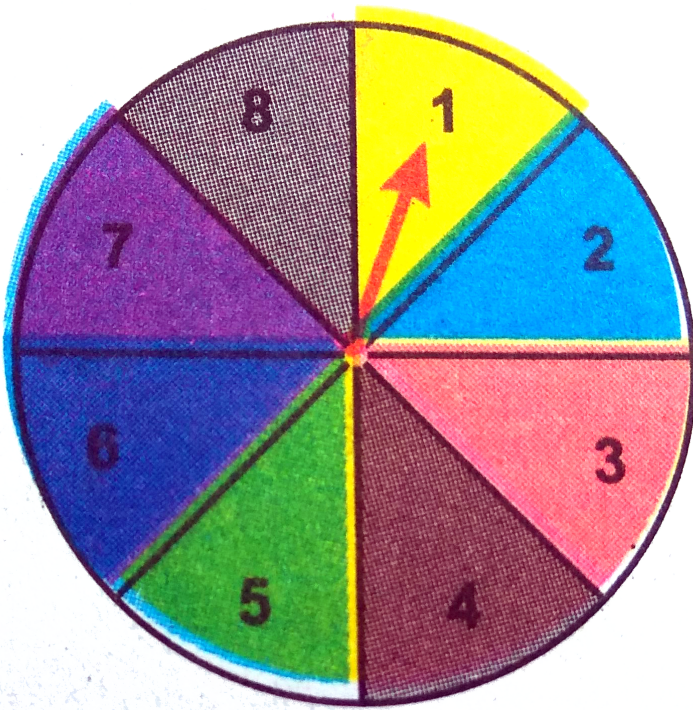
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9. What is the probability that the spinner will not land on a multiple of 3 ?
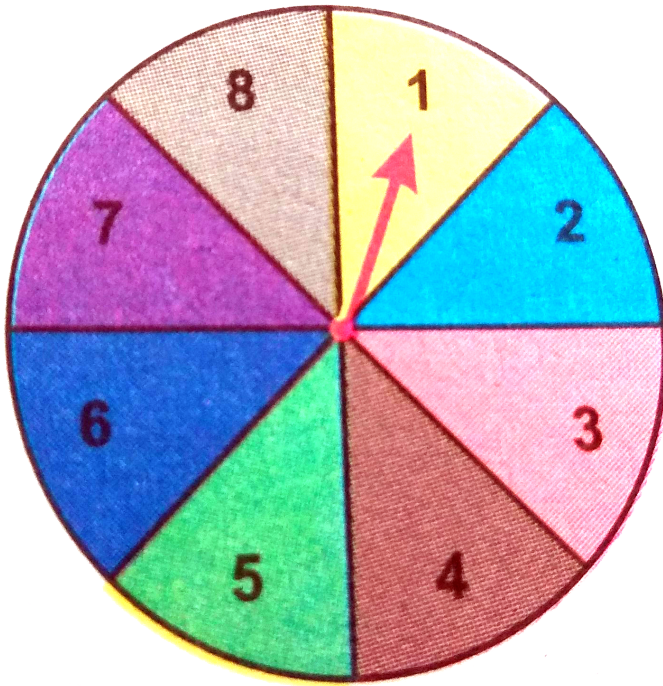
10. Frame two problems in calculating probability, based on the spinner shown here.

Exercise 9 2

1. A company manufactures 10000 Laptops in 6 months. Out of which 25 of them are found to be defective. When you choose one Laptop from the manufactured, what is the probability that selected Laptop is a good one .

Exercise 9 3

1. In a survey of 400 youngsters aged 16-20 years, it was found that 191 have their voter ID card. If a youngster is seceted at random, find the probability that the youngster does not have their voter ID card

2. A number between 0 and 1 that is used to measure uncertainty is called

A. Random variable

B. Trial

C. Simple event

D. Probability

Answer: A::B

Exercise 9 4

1. The probability of guessing the correct answer to a certain question is $\dfrac{x}{3}$. If the probability of not guessing the correct answer is $\dfrac{x}{5}$, then find the value of x .

2. Probability lies between

A. $-1 \text{ and } +1$

B. 0 and 1

C. 0 and n

D. o and ∞

Answer: A::D

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1. If a probability of a player winning a particular tennis match is 0.72 . What is the probabillity of the player loosing the match ?

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2. The probability based on concept of relative frequency theory is called

A. Empirical probability

B. Classical probability

C. Both (1) and (2)

D. Neither (1) not (2)

Answer: A::B::C

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Exercise 9 6

1. 1500 families were surveyed and following date was recorded about their maids at home

Type of maids	Only part time	Only full time	Both
Number of families	860	370	250

A familiy is selected at random. Find the probability that the family selected has

(i) Both types of maids (ii) Part time maids (iii) No maids

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2. The probability of an event cannot be

A. Equal to zero

B. Greater than zero

C. Equal to one

D. Less than zero

Answer: D

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Exercise 9 7

1. The probability of all possible outcomes ofa a random experiment is always equal to

A. one

B. Zero

C. Infinify

D. Less than one

Answer:

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Exercise 9 8

1. If A is any event is S then its complement is A' then P(A') is equal to

A. 1

B. 0

C. 1-A

D. 1-P(A)

Answer: A

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1. Which of the following cannot be taken as probability of an event ?

A. 0

B. 0.5

C. 1

D. -1

Answer: A

1. A particular result of an experiment is called

     A. Trial

     B. Simple event

     C. Compound event

     D. Outcome

Answer: D

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Exercise 9 11

1. Collection of one or more outcomes of an experiment is called

     A. Event

     B. Outcome

C. Sample point

D. None of above

Answer:

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1. The six faces of the dice are called equally likely if the dice is

A. Small

B. Fair

C. Six-faced

D. Round

Answer: A

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Additional Questions And Answers Exercise 9 1

1. An unbiased die is thrown. What is the probability of getting

(i) an even number or a multiple of 3 .

(ii) a number between 3 and 6.

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2. Two unbiased coins are tossed simultaneously find the probability of getting

(i) two heads (ii) one head (iii) at least one head (iv) at most one head .

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3. What is the probability that a leap year has 53 sundays?

4. What is the probability that a number selected from the numbers 1 ,

2, 3, ..., 25 is a prime number when each of the given number is

equally likely to be selected ?

Additional Questions And Answers Exercise 9 2

1. Tickets numbered from 1 to 20 are mixed up together and then a

ticket is drawn at random. What is the probability that the ticket has a

number which is a multiple of 3 or 7 ?

2. One card is drawn from a pack of 52 cards, each of the 52 cards being equally likely to be drawn. Find the probability that the card drawn is

(i) an ace,

(ii) either red card or king .

3. A bag contains 3 red and 2 blue marbles. A marble is drawn at random. What is the probability of drawing a blue marble ?

4. Two dice are thrown simultaneously . Find the probability of getting

(i) an even number as the sum.

(ii) a total of at least 10

(iii) a doublet of even number .

5. An urn contains 10 red and 8 white balls. One ball is drawn at random. Find the probability that the ball drawn is white .

Unit Test Part A

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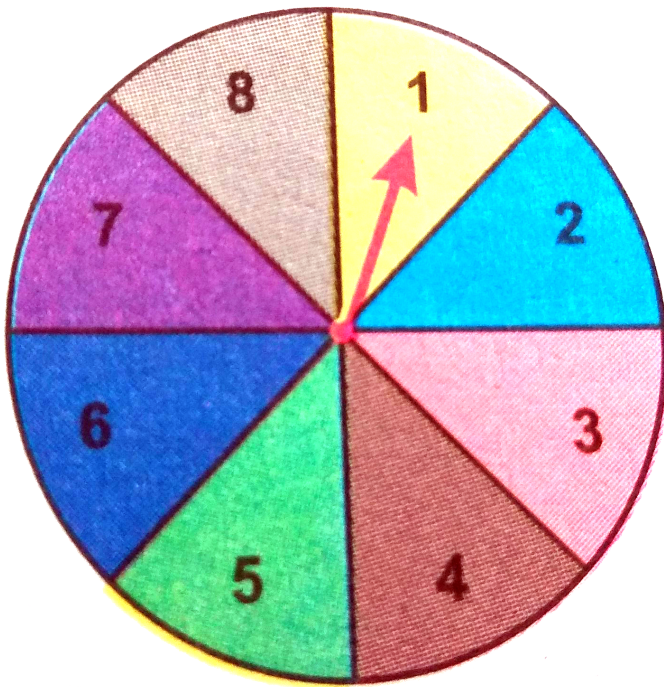(i) equal to 1 (ii) equal to 4 (iii) less than 13

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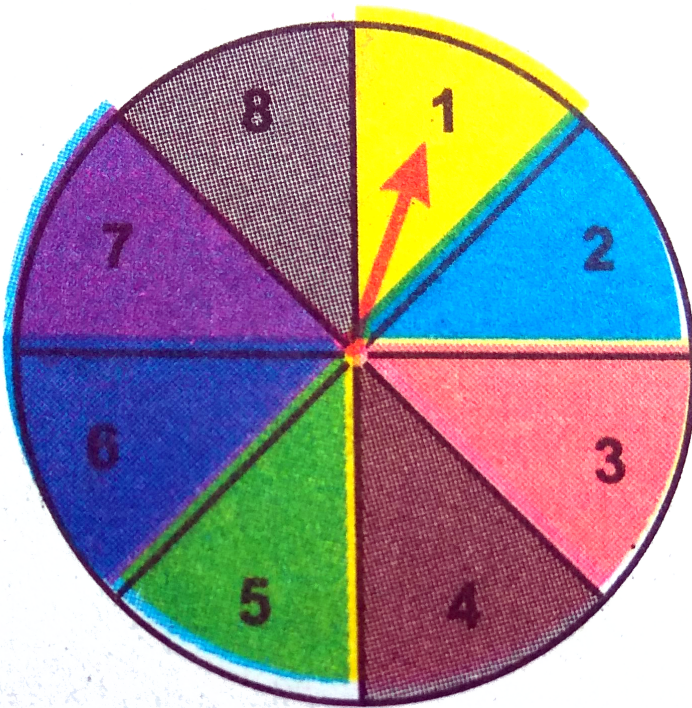
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