

LaPIS Diagnostic Test Workbook - Mathematics

Name : Gokulakrishna S

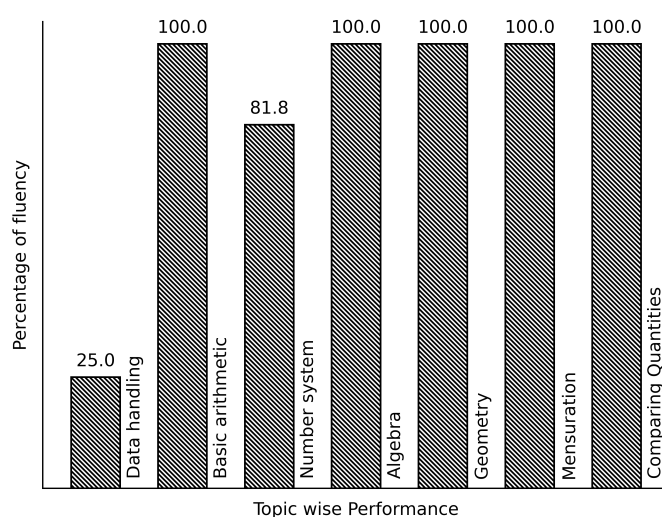
Class : 7

Section : A

School : AKV Public School

Login ID : AKV105

Gokulakrishna S's Performance Report



Score: 35/40

Percentage: 87.5%

Gokulakrishna S's Study Planner

Date	Topics Planned	Q. Numbers	Teacher Remark	Teacher Sign	Parent Sign

Teacher's Feedback to Student

Class Teacher Signature

Principal Signature

Data handling

Topics to be Improved	
Arithmetic mean, mode and median	Mean, Median and Mode
Chance of probability	Basis of probability, Sample space in probability

Hi, here in this video you will learn **Mean, Median, Mode**



Question: 1

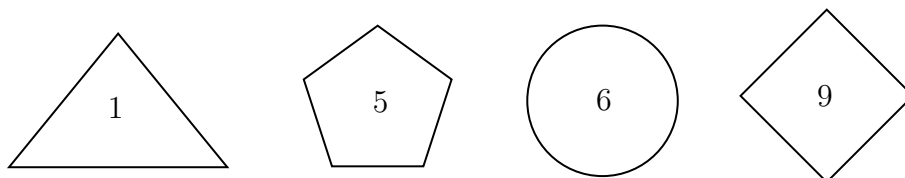
Find the mode of the following data: 5, 15, 23, 5, 32, 44, 72, 55, 6, 3, 5, 65, 45, 67, 24, 19 and 98.

Answer:

Mode is the number that occurs _____ (frequently / rarely) in a given list of observations.
Arranging the data in ascending order: _____
_____ occurs most number of times. Then, mode of the given data is _____

Question: 2

Which shape contains median of the given data 3, 5, 6, 2, 7, 9, 6, 4 and 1



Answer:

Median is the _____(first/central/last) value of a data when the data is arranged in ascending or descending order.

Arrange the given data in ascending order : _____

Central value of the given data is _____ and it is the _____ of a data.

Question: 3

Marks scored	100	90	80	70
Number of students	4	5	2	1

Mean = _____ , Median = _____ and Mode = _____.

Answer:

Mean = $\frac{\text{sum of all observation}}{\text{number of observation}}$.

Here sum of all observation = _____, number of observation = _____

Therefore, mean = _____

Arrange the data in ascending order : _____

Here, median = _____, mode = _____.

Hi, here in this video you will learn **Basics of probability**



Question: 4

Identify the sure events and impossible events

- (i) The sun rises in the west.
- (ii) Water is colourless.
- (iii) Clock rotates in clock wise direction.
- (iv) Ball is square in shape.

Answer:

Events that always occur are called _____ (sure/ impossible) events.

Events that cannot occur are called _____ (sure/ impossible) events.

Here, The sun rises in the west is _____ event. Water is colourless is _____ event.

Clock rotates in clock wise direction is _____ event. Ball is square in shape is _____ event.

Question: 5

Probability of sure events is _____ (greater / smaller) than probability of impossible events.

Answer:

Probability of sure event = _____ (0/ 1/ any number).

Probability of impossible event = _____ (0/ 1/ any number).

Therefore, Probability of sure event _____ Probability of impossible event.

Question: 6

Raju has pencil, an eraser, a scale, sharpener, colour pencil and protractor in his box. What is the probability of getting a pen from his box.

Answer:

Things Raju have _____

Does Raju have pen in his box, _____ (Yes/ No).

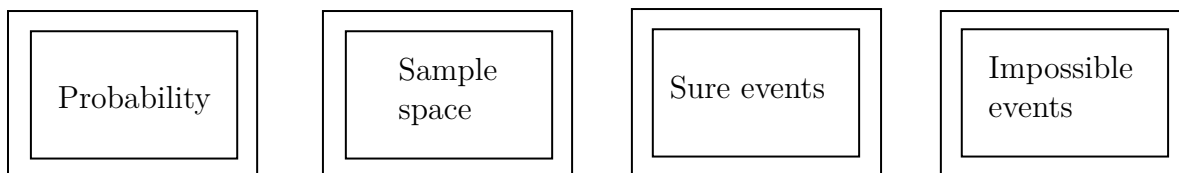
Then probability of getting pen from his box is _____ (0/1)

Hi, here in this video you will learn **Basics of probability**



Question: 7

Which of the following contains list of all possible outcomes.



Answer:

Probability is the measure of _____ (chance /number) of an events happenings.

Sample space consists of _____ (possible/ impossible) outcomes.

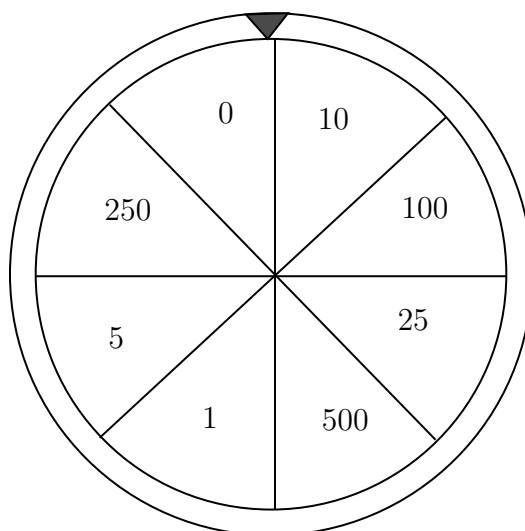
Sure events always _____ (occurs/don't occurs).

Impossible events _____ (occurs/ don't occurs).

Therefore, _____ contains list of possible outcomes.

Question: 8

Write the possible outcomes while spinning the given wheel.



Answer:

Outcomes are _____ (possible/impossible) results of an experiment.

The possible outcomes while spinning wheel are ₹0, ₹10, _____

Question: 9

A bag contains three balls of colour blue, green and red. Write the possible outcomes if two balls are taken out.

Answer:

A bag contains _____, _____ and _____ balls.

If one of the ball is blue in colour, then other ball can be _____ or _____

If one of the ball is green in colour, then other ball can be _____ or _____.

If one of the ball is red in colour, then other ball can be _____ or _____.

Therefore, if two balls are taken out then possible outcomes are blue + _____ ,
_____ + _____, _____ + _____,

Number system

Topics to be Improved	
Law of Exponents	Law of Exponents
Operations on rational numbers	Subtraction of rational numbers

Hi, here in this video you will learn **Law of exponents**



Question: 10

$(x)^0$ is equal to _____.

Answer:

_____ (Exponents/Base) tells us how many times a number should be multiplied by itself to get the desired result.

In $(x)^0$ base = _____

Power = _____

Any number or variable with power zero is equal to _____.

Therefore, $(x)^0$ equal to _____.

Question: 11

i. $a^m \times a^n =$ _____

ii. $a^m \div a^n =$ _____

Answer:

Multiplication of two numbers with same base with different power, their exponents are _____ (added/ subtracted)

Division of two numbers with same base with different power, their exponents are _____ (added/ subtracted).

Question: 12

Circle the result of the expression $(a^0 \times b^1) + (m^1 \times n^0) + (x^0 \times y^1)$

$a + n + x$ bmy 1 $ab + mn + xy$ 0 anx $b + m + y$

Answer:

Any number with power zero is equal to _____ (One/ Zero).

Any number with power one is equal to _____ (same/ different) number.

$$(a^0 \times b^1) + (m^1 \times n^0) + (x^0 \times y^1) = (\text{_____}) + (\text{_____}) + (\text{_____})$$

$$= \text{_____} + \text{_____} + \text{_____}$$

$$= \text{_____}$$

Hi, here in this video you will learn **Operation on rational numbers**



Question: 13

Solve: $\frac{-3}{3} + \frac{1}{3}$

Answer:

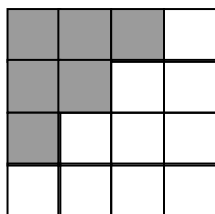
Fractions with same denominators are called _____ (like/ unlike) fractions.

Fraction can be added only if they are _____ (like/ unlike) fractions.

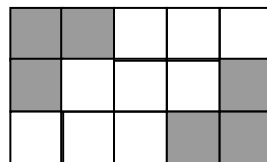
$$\frac{-3}{3} + \frac{1}{3} = \frac{\text{---}}{3} =$$

Question: 14

Find the addition of shaded part of box A and shaded part of box B.



A



B

Answer:

Total number of square in box A = _____.

Number of shaded square in box A = _____

Shaded part of box A in fraction = _____

Total number of square in box B = _____.

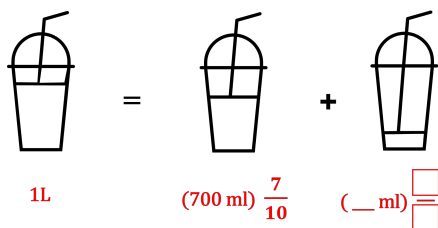
Number of shaded square in box B = _____.

Shaded part of box B in fraction = _____.

Shaded part of box A + Shaded part of box B = _____ + _____ = _____

Question: 15

Find the missing values in the given figure.



Answer:

One litre = _____ ml

$\frac{7}{10}$ of one liter = $\frac{7}{10} \times$ _____ ml = _____ ml

Given: $1 = \frac{7}{10} +$ _____

Transposing $\frac{7}{10}$ to other sides, $1 - \frac{7}{10} =$ _____

Therefore, result is _____.