

LaPIS Diagnostic Test Workbook - Mathematics

Name : Praneeth R

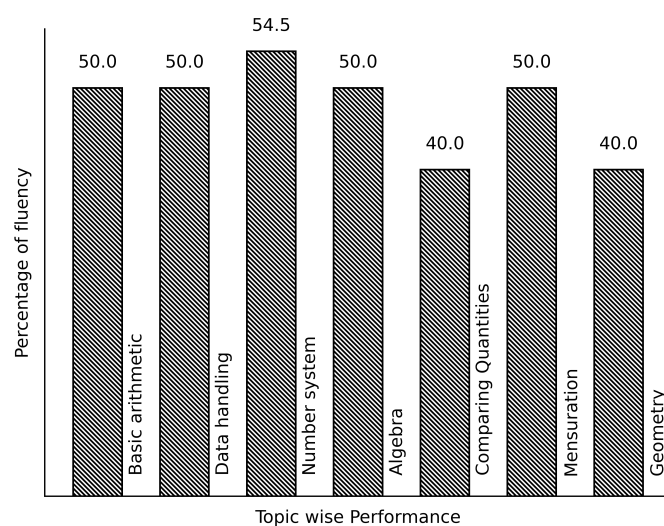
Class : 7

Section : C

School : AKV Public School

Login ID : AKV178

Praneeth R's Performance Report



Score: 19/40

Percentage: 47.5%

Praneeth R's Study Planner

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

Teacher's Feedback to Student

Class Teacher Signature

Principal Signature

Basic arithmetic

Topics to be Improved	
Types of angles	Identification of types of angles

Hi, here in this video you will learn **Types of Angles**



Question: 1

Find the angles.



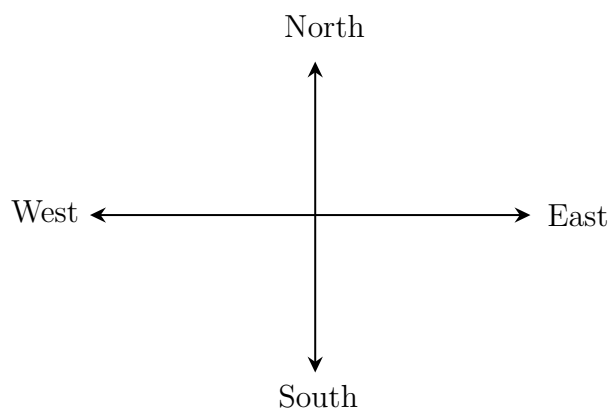
Answer:

The angle ranges from ____° to ____°.

The angle perpendicular to 0° is ____°.

The straight line measures ____°.

Question: 2



The angle formed between the directions

(i) West and East is _____ angle.

(ii) North and East is _____ angle.

(iii) East and South is _____ angle.

Answer:

The angle formed between West and East is ____° and it is called _____ angle.

The angle formed between North and East is ____° and it is called _____ angle.

The angle formed between East and South is ____° and it is called _____ angle.

Question: 3

The addition of straight angle and right angle is _____ angle.

Answer:

The measurement of straight angle is _____°

The measurement of right angle is _____°.

Straight angle + Right angle = _____ + _____ = _____

It is called as _____ angle.

Mensuration

Topics to be Improved

Area

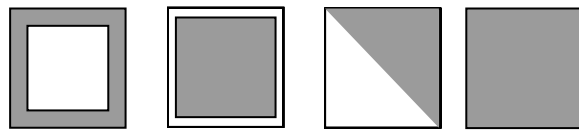
Area of rectangle

Hi, here in this video you will learn **Area**



Question: 4

Find which of the shaded portion in the given shape represent it's area.



Answer:

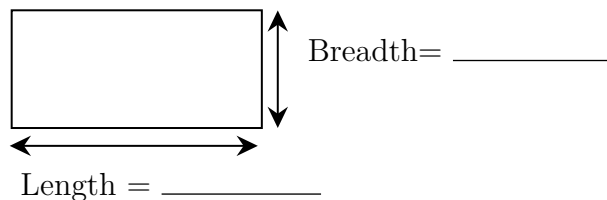
Given figure is _____ in shape.

Area is the _____ (inside/ outside/ boundary) of a shape.

Question: 5

Find the area of a rectangular garden whose dimension is 25 ft in length and 20 ft in breadth.

Answer:



The garden is in _____ shape.

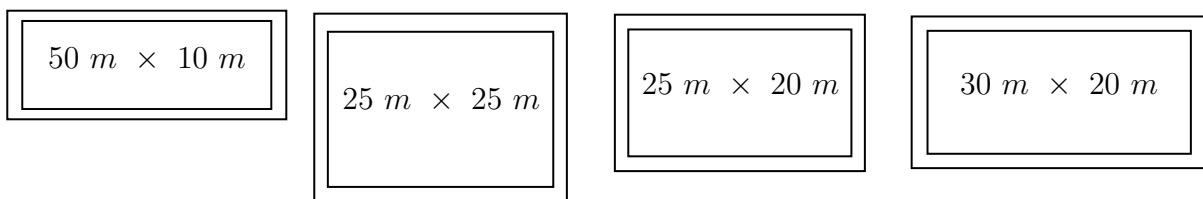
Length of garden is _____ and breadth of garden is _____.

Formula for area of the shape = _____.

The area of garden = _____ x _____ = _____ cm^2

Question: 6

Shade the possible dimension of the door whose area is $500\ m^2$



Answer:

Door is _____ in shape. Area of the _____ shaped door is _____.

Dimensions	Length	Breadth	Area
50m × 10m			
25m × 25m			
25m × 20m			
30m × 20m			

Therefore, possible dimension of the door whose area is 500 m^2 is/are _____

Data handling

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

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



Question: 7

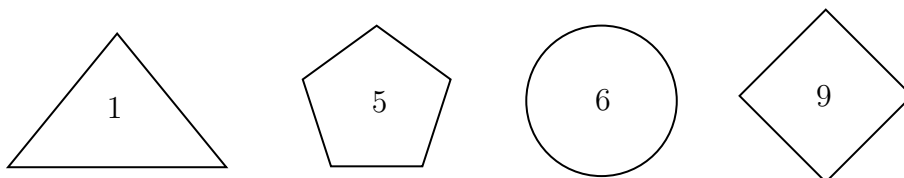
Find the mode of the following data: 5, 15, 23, 5, 32, 44, 72, 55, 6, 3, 5, 65, 45, 67, 24, 19 and 98.

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: 8

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: 9

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: 10

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: 11

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: 12

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)

Geometry

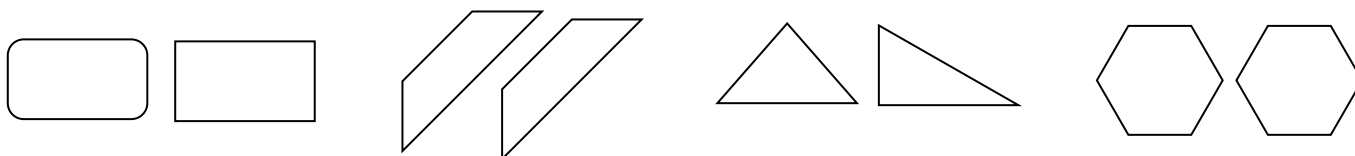
Topics to be Improved	
Criteria for congruence of triangle	Identification of criteria of congruence of triangles
Faces vertex and edges	Identification of faces, edges and vertices
Right angle triangle and pythagoras property	Basics of Pythagoras property
Related angles	Basic of angles
Transversal angle made by transversal	Basics of Transversal angle
Angle sum property of triangle	Angle sum property of triangle

Hi, here in this video you will learn **Criteria of congruence**



Question: 13

Circle the groups that contain congruent images.



Answer:

Two geometrical shapes are said to be congruent if they are _____ (identical/non-identical) in shapes and size.

Example: Square and Rectangle are _____ (congruent/not congruent).

Question: 14

If the three sides of the triangle are equal to the corresponding sides of the other triangle, then two triangles are congruent under _____ (SSS/ASA/SAS) criteria .

Answer:

Two triangle are _____ (congruent/not congruent) if they are identical in shapes and size. Criteria for congruence of triangles are SSS, _____ and _____.

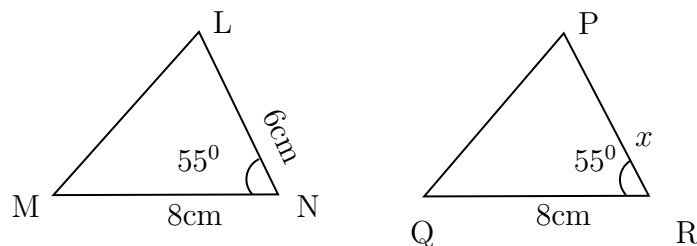
1. In SSS Congruence criteria - ____ (2/ 3/ 5) sides of the triangle are _____ (equal/ not equal) to the three corresponding sides of the other triangle.

2. In SAS Congruence criteria - ____ (2/ 3/ 5) sides and _____ (one/two) angle between them are equal to the corresponding sides and the included angle of the other triangle.
3. In ASA Congruence criteria - ____ (2/ 3/ 5) angles and _____ (one/two) side between them are equal to the corresponding angles and the included side of the other triangle.

SSS	_____ sides and _____ angles are equal
SAS	_____ sides and _____ angles are equal
ASA	_____ sides and _____ angles are equal

Question: 15

The triangles LNM and PRQ are congruent by SAS criteria. Then find the side PR



Answer:

The given two triangles satisfy _____ criteria of congruence.
 By SAS congruence criteria, $MN =$ _____, _____ and $\angle N =$ _____
 The side $MN = 8$ cm in $\triangle LNM$ is equal to the side _____ in $\triangle PRQ$
 The common included angle in $\triangle LNM$ and $\triangle PRQ$ are _____
 The side PR is equal to the side in _____ $\triangle LNM$.
 Therefore, length of side $PR =$ _____

Hi, here in this video you will learn **Basics of 3D model**

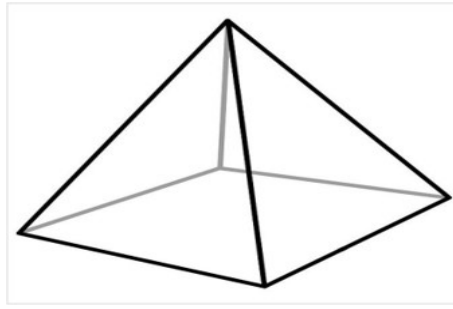


Question: 16

A point at which two or more lines segments meet is called _____ (Vertex/ edges/ faces).

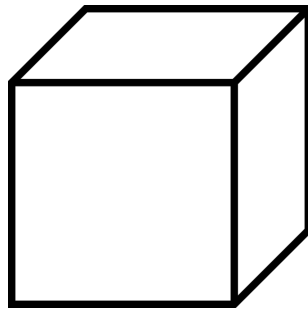
Answer:

_____ has two end point (line/line segment/ray).
 A _____ is a point where two or more line segments meet (Vertex/ edges/ faces).
 Mark the vertices in the diagram,



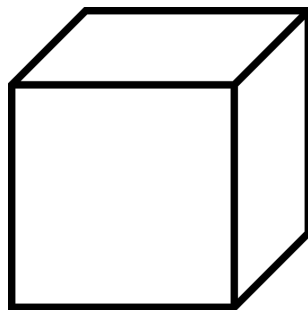
Question: 17

Mark and find the number of vertices, edges and faces in a cube.



Answer:

Mark the vertex, edges and faces in a cube.



Count the number of vertex, edges and faces in a cube.

Cube have _____ vertices, _____ edges and _____ faces.

Question: 18

How many vertices, edges and faces does dices have?



Answer:

The shape of dice is _____.

Dices have _____ vertices, _____ edges and _____ faces.

Hi, here in this video you will learn **Pythagoras property**



Question: 19

In a right angled triangle, square of the _____ = sum of the squares of the legs.

Answer:

Pythagoras theorem is only applicable for _____ triangle.

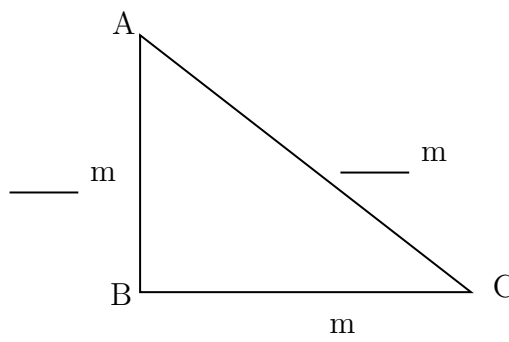
Longest side of the triangle is _____ (hypotenuse/ legs) and other two sides are called _____(hypotenuse/ legs).

Pythagoras theorem states that _____.

Question: 20

Find the hypotenuse of the triangle ABC if base is 12 m and altitude is 5 m.

Answer:



Pythagoras theorem states that square of the _____ = sum of the squares of its _____.

Given: Base = _____, Altitude = _____,

Base and altitude are _____ (hypotenuse/ legs) of the triangle.

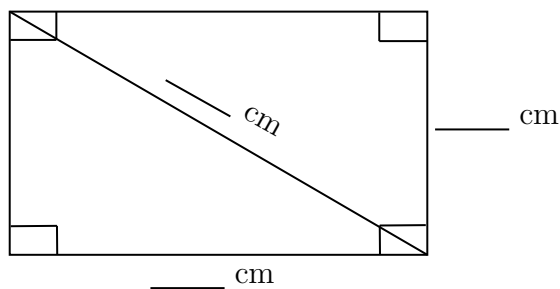
By Pythagoras theorem, $(\text{---})^2 = (\text{---})^2 + (\text{---})^2$
 $\text{---} = \text{---} + \text{---}$

Therefore, hypotenuse of the triangle is --- .

Question: 21

Find the length of the rectangle, if breadth is 3 cm and diagonal is 5 cm.

Answer:



Pythagoras theorem states that square on the --- = sum of the squares on --- .

Is Pythagoras theorem applicable in rectangle? --- (yes/ no).

Given: breadth = --- , length of diagonal = ---

By Pythagoras theorem, $(\text{---})^2 = (\text{---})^2 + (\text{---})^2$
 $\text{---} = \text{---} + \text{---}$

Therefore, diagonal of the rectangle is ---

Hi, here in this video you will learn **Related Angles**



Question: 22

- (i) When two rays of an angle are perpendicular, then the angle formed between them is a --- angle .
- (ii) When two rays of an angle are in opposite sides, then the angle formed between them is a --- angle .

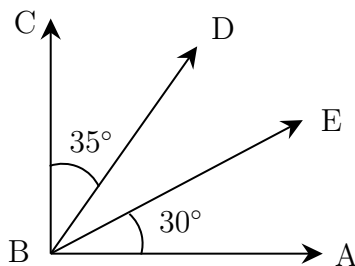
Answer:

A --- (line segment /ray) begins from one point and travels endlessly in a direction.

- (i) The angle formed between two perpendicular rays is ---° and it is called --- angle.
- (ii) If two rays starting at same point moves in opposite direction, they form a --- (straight / perpendicular) line. The measure of the angle formed is ---° and it is called --- angles.

Question: 23

Find the angle of $\angle DBE$



Answer:

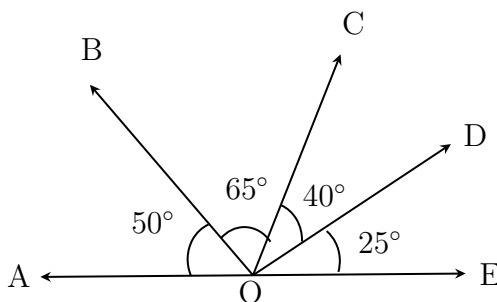
BA and BC are _____ (parallel / perpendicular) rays.
The angle formed between this rays is ____, $\angle ABC =$ ____.

$$\begin{aligned}\angle ABC &= \angle ABE + \text{_____} + \text{_____} \\ &= 30^\circ + \text{_____} + \text{_____} \\ &= \text{_____}\end{aligned}$$

Therefore, $\angle DBE =$ _____

Question: 24

Find the complementary angles in the given diagram.



Answer:

Two angles are said be complementary if sum of their angles is equal to _____.

$\angle AOB =$ _____, and its complement angle is _____.

$\angle BOC =$ _____, and its complement angle is _____.

$\angle COD =$ _____, and its complement angle is _____.

$\angle DOE =$ _____, and its complement angle is _____.

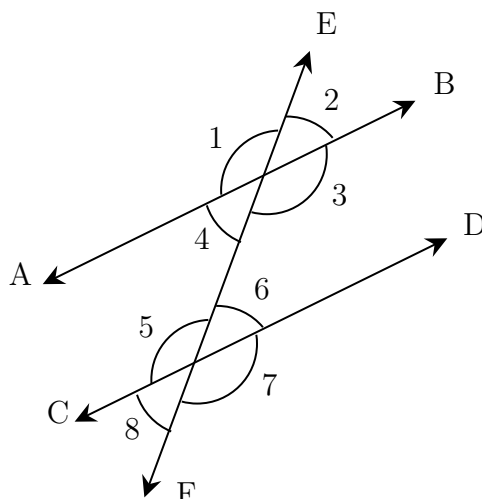
Therefore, in the given figure the complementary angles are $\angle AOB$, _____ and $\angle BOC$, _____

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



Question: 25

In given diagram, $\angle 1$ and $\angle 7$ are _____ (alternate / corresponding) angles.



Answer:

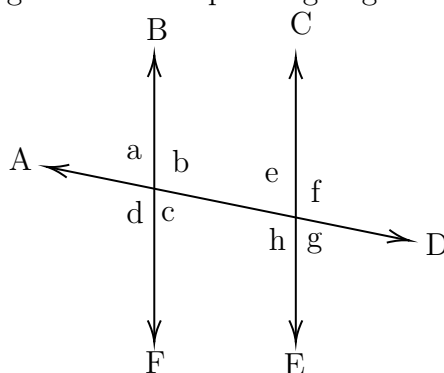
A line that intersects two or more lines at distinct points is called a _____ (transversal/ Intersecting line).

Angle that lies on different vertices and on the opposite sides of transversal is _____ angles.

Angle that lies on different vertices and on the same sides of transversal is _____ angles. Therefore, $\angle 1$ and $\angle 7$ are _____

Question: 26

Find the transversal, alternate angles and corresponding angles in a given diagram.



Answer:

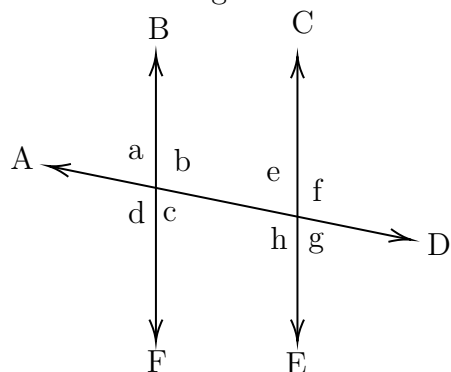
A line that intersects two or more lines at distinct points is called a _____ (transversal/ Intersecting line).

In a given diagram, _____ is a transversal line. (BF/AD/CE)

Alternate angles	Corresponding angles
$\angle a$ and $\angle g$, $\angle b$ and $\angle h$,	$\angle a$ and $\angle e$, $\angle b$ and $\angle f$,

Question: 27

Find $\angle e$ and $\angle g$ if $\angle a = 30^\circ$.



Answer:

When parallel lines cut by a transversal,

- (i) Alternate angles are _____ (equal / not equal).
- (ii) Corresponding angles are _____ (equal / not equal).

Here, alternate angle of $\angle a$ is _____ and its value is _____.

Corresponding angle of $\angle a$ is _____ and its value is _____.

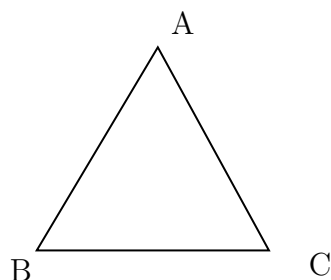
Hi, here in this video you will learn **Angle sum property**



Question: 28

Sum of the angles of triangle is _____.

Answer:



$$\angle A + \angle B + \angle C = \underline{\hspace{2cm}}$$

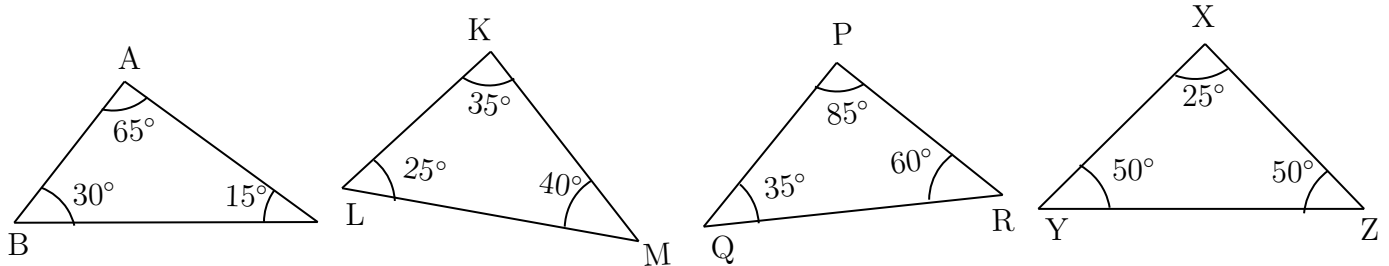
Angle sum formula = $(n - 2) \times 180^\circ$, n = number of sides

Triangle has _____ sides.

Sum of the angles of triangle = $(\text{_____} - 2) \times 180^\circ = \text{_____}$

Question: 29

Which of the following triangle satisfy the angle sum property.



Answer:

Angle sum property of triangle: sum of the angles of a triangle is _____

In $\triangle ABC$, Sum of the angles = $\angle A + \angle B + \angle C = \text{_____} = \text{_____}$

In $\triangle PQR$, Sum of the angles = _____ = _____ = _____

In $\triangle KLM$, Sum of the angles = _____ = _____ = _____

In $\triangle XYZ$, Sum of the angles = _____ = _____ = _____

Therefore, the triangles that satisfy the angle sum property are = _____

Question: 30

Find the angles of triangle, if their angles are in the ratio 8:6:4.

Answer:

Ratio of angles in the triangle is _____

Let's consider the angles of triangle be $8x$, _____ and _____

We know sum of the angles of a triangle is _____

Therefore, $8x + \text{_____} + \text{_____} = 180^\circ$. The value of $x = \text{_____}$

The angles of the triangle are _____

Number system

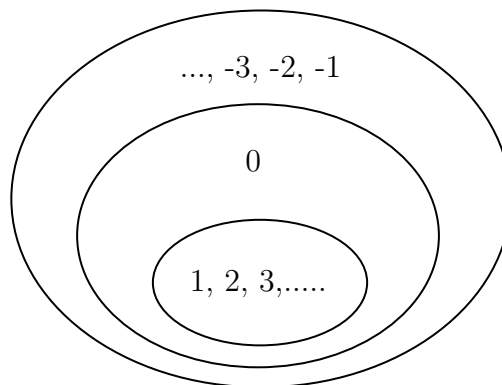
Topics to be Improved	
Integers	Basics of integers
Operations on rational numbers	Division of rational numbers
Exponents	Solving exponents
Positive and negative rational numbers	Identification of positive rational numbers
Fractions	Division of fraction

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



Question: 31

Highlight the ring that contains whole numbers.



Answer:

The numbers inside the inner ring (1, 2, 3,...) are _____ numbers.

The numbers inside the middle ring are _____ numbers.

The numbers inside the outer ring are negative numbers, positive numbers and zero and they are called as _____.

Question: 32

Colour the frame of the box which contains the number 1, 4 and -10

Whole numbers	Negative numbers	Integers	Naturals numbers
---------------	------------------	----------	------------------

Answer:

Whole number consists of 0,1,2,3,4,..... Negative number consists of _____.
Natural numbers consists of _____. Integers consists of _____.
Now, 1, 4, -10 are in _____.

Question: 33

State whether the statement is true or false.

Every positive number is an integer.

Answer:

Positive numbers are _____. Integers consists of _____.
Therefore, positive numbers are _____ (in/not in) integers.

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



Question: 34

Fill in the boxes to make the given expression correct.

$$\frac{1}{5} \div \frac{14}{15} = \frac{1}{\boxed{}} \times \frac{\boxed{}}{\boxed{}}$$

Answer:

When any fraction is divided by a fraction, we multiply the dividend by the _____
(same/reciprocal) of the divisor.

Here, dividend = _____ and divisor = _____

$$\frac{1}{5} \div \frac{14}{15} = \frac{1}{\boxed{}} \times \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Question: 35

Solve: $\frac{18}{7} \div 0.6$

Answer:

Fraction form of 0.6 = _____,

when any fraction is divided by a fraction, we multiply the dividend by the _____
(same/reciprocal) of the divisor. Here, dividend = _____ and divisor = _____.

$$\frac{18}{7} \div \frac{\boxed{}}{\boxed{}} = \frac{18}{7} \times \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Question: 36

Find the missing number in the expression $\frac{8}{3} \div \frac{16}{\square} = 2$

Answer:

$$\frac{8}{3} \div \frac{16}{\square} = 2$$

$$\frac{8}{3} \times \frac{\square}{16} = 2$$

Transposing $8/3$ to RHS,

$$\frac{\square}{16} = 2 \square \frac{8}{3}$$

$$\frac{\square}{16} = 2 \times \frac{\square}{\square}$$

$$\frac{\square}{16} = \frac{\square}{\square}$$

Transposing 16 to other side, the result is _____.

Hi, here in this video you will learn **Exponents and power**



Question: 37

Find the exponential form of 1000.

Answer:

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

Exponents is also called as _____ (Base / Power).

1000 can be written as $= 10 \times \text{_____} \times \text{_____}$

10 is raised to the power of $\text{___} = (10)\text{---}$

Question: 38

Find the value of $(-2)^3$.

Answer:

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

In this exponential form $(-2)^3$, base = ____, power = ____.
 $(-2)^3 = ___ \times ___ \times ___ = ___.$

Question: 39

- (i) Tenth power of 100 is ____ ($(10)^{100}$ or $(100)^{10}$).
- (ii) k is raised to the power of 5 is ____ ($(k)^5$ or $(5)^k$).

Answer:

Exponential form = (Base)——

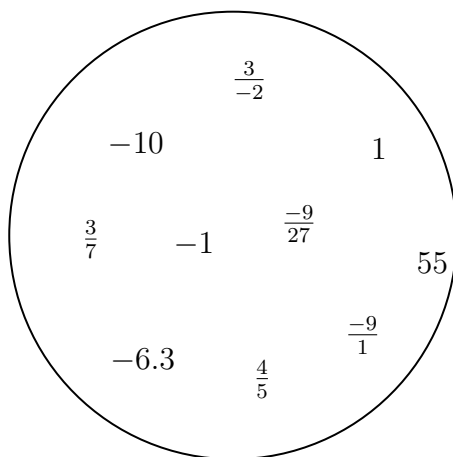
- (i) Tenth power of 100 : Base = ____, Power/Exponents = ____, exponential form = ____.
- (ii) k is raised to the power of 5 : Base = ____, Power/Exponent = ____, exponential form = ____.

Hi, here in this video you will learn **Positive and Negative rational numbers**



Question: 40

Segregate positive and negative rational number.



Answer:

- If both the numerator and the denominator of a rational number are _____ (positive/negative), then it is positive rational number.

- If either the numerator and the denominator of a rational number are negative, then it is _____ (positive/negative) rational number.

In the given circle, positive rational numbers are _____ and negative rational numbers are _____.

Question: 41

$\frac{-3}{-4}$ is a _____ (positive /negative / neither positive nor negative) rational number.

Answer:

-3 is a _____ number, -4 is a _____ number.

Division of $\frac{-3}{-4} = \frac{\boxed{}}{\boxed{}}$ and this _____ rational number.

(Positive / Negative / Neither positive nor negative rational number)

Question: 42

The product of a positive rational number and a negative rational number is _____ rational number. (Positive/ Negative/ neither positive nor negative)

Answer:

Examples for positive rational numbers: _____

Examples for negative rational numbers: _____

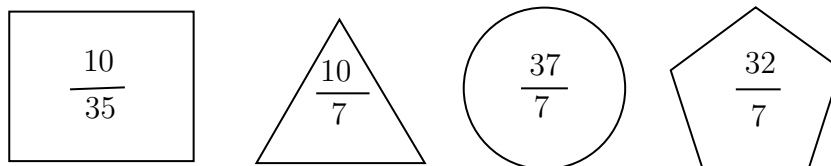
Positive rational number \times Negative rational number = _____ \times _____ = _____ and this is _____ rational number

Hi, here in this video you will learn **Division on fractions**



Question: 43

Find the shape which contains the improper fraction of $5\frac{2}{7}$.



Answer:

$5\frac{2}{7}$ is a _____ (proper/mixed) fraction.

Here, 5 is _____, 2 is _____ and 7 is _____.

To convert mixed fraction into improper fraction, $\frac{(\text{Whole} \times \text{Denominator}) + \text{Numerator}}{\text{Denominator}}$

$$5\frac{2}{7} = \frac{(\text{---} \times \text{---}) + \text{---}}{7} = \frac{\boxed{}}{\boxed{}}$$

Question: 44

Solve: $\frac{1}{3} \div \frac{14}{3}$

Answer:

To divide a fraction by another fraction, multiply the dividend by _____ (same / reciprocal) of the divisor. Here, dividend = _____ and divisor = _____.

$$\frac{1}{3} \div \frac{14}{3} = \frac{1}{3} \times \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Question: 45

Find the half of the fraction $\frac{12}{40}$.

Answer:

To find half of a number, divide the number by _____

$$\frac{12}{40} \div \underline{\hspace{2cm}} = \frac{12}{40} \times \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Then the answer is _____

Comparing Quantities

Topics to be Improved	
Percentage	Basic of percentage
Simple interest	Calculation of simple interest
Conversion of fraction into percentage	Conversion of fraction into percentage

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



Question: 46

2% can be written as

Answer:

Percentages are numerators of fractions with denominator_____

$$2\% = \frac{\boxed{}}{\boxed{}}$$

Question: 47

Arun attended the LaPIS test for 100 marks and got 75% marks. What is the mark scored by Arun?

Answer:

Arun attended LaPIS test for _____ marks. He got _____ marks.

75 % can be written in fraction form $\frac{\boxed{}}{\boxed{}}$

Then the mark scored by Arun = Total mark \times 75% = _____ $\times \frac{\boxed{}}{\boxed{}} =$ _____

Question: 48

There are 25 apples in a basket in which 10 of them are rotten. Find the percentage of rotten apples.

Answer:

There are _____ apples in a basket.

Number of rotten apples are _____ .

Fraction form of rotten apples in a basket = $\frac{\boxed{}}{\boxed{}}$

Convert it into a percent = _____ x _____ % = _____

Hi, here in this video you will learn **Simple Interest**



Question: 49

Match the following.

Column A	
i	Principle(P)
ii	Amount (A)
iii	Rate (R)
iv	Time period (T)

Column B	
a	Interest calculated based on this
b	Total sum you borrow
c	Number of years
d	Total sum with interest

Answer:

Formula for calculating simple interest = _____.

Interest calculated based on _____.

Total sum you borrow is known as _____.

Number of years is _____. Total sum with interest is _____.

Question: 50

Sara deposited Rs.1200 in a bank. After three years, she received Rs.1320. Find the interest she earned.

Answer:

Given:

Amount = _____ , Principle = _____ , Time period = _____.

If Amount and principle is given, then formula for calculating interest is _____.

Interest = _____ - _____ = _____

Question: 51

The simple interest on Rs.5000 for 3 years is Rs.1350. Find the rate of interest.

Answer:

Interest = _____ , Time period = _____ , Principal = _____.

Rate of interest = $\frac{\text{_____} \times 100}{\text{Principal} \times \text{_____}}$

Substituting values in the formula,

$$\text{Rate of interest} = \frac{\text{_____} \times 100}{\text{Principal} \times \text{_____}}$$

Rate of interest = _____

Therefore, the rate of interest is _____ %

Hi, here in this video you will learn **Converting fraction into percentage**



Question: 52

Complete the box in the given equation.

$$5\% = \frac{5}{\boxed{\quad}}$$

Answer:

Percentage are the fraction with the denominator _____.

Therefore, 5% can be expressed as _____

Question: 53

Mark the correct conversion form of fraction $\frac{1}{2}$ to percentage.

- (i) $\frac{1}{2} \times \frac{50}{50} = \frac{50}{100} = 50\%$
- (ii) $\frac{1}{2} \times \frac{100}{100} = \frac{100}{200} = 200\%$
- (iii) $\frac{1}{2} \times 100 = \frac{100}{2} = 50\%$

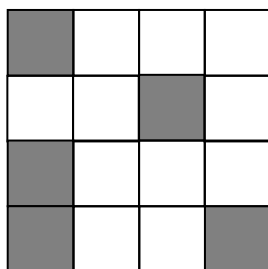
Answer:

To convert fraction into percentage, the value of _____ (denominator / numerator) should be 100 or _____ (multiply / divide) the fraction with 100 %.

Therefore, correct conversion form is _____

Question: 54

Find the percentage of shaded part of square.



Answer:

The square shape is divided into _____ parts.

Number of shaded part of square is _____.

Shaded part of square in fraction is _____

To Convert $\frac{\square}{\square}$ into percentage , $\frac{\square}{\square} \times 100$

Algebra

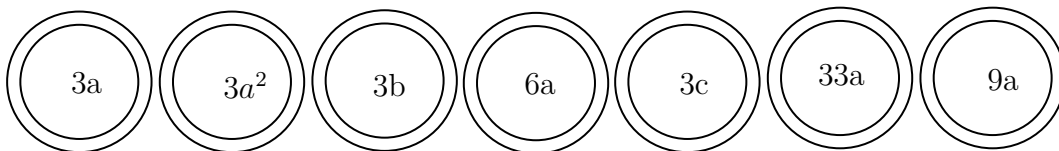
Topics to be Improved	
Addition and subtraction of algebraic expressions	Like terms and Unlike terms
subtraction of algebraic expressions	subtraction of algebraic expressions
Basics of simple equation	Solving of simple equation

Hi, here in this video you will learn **Addition on expression**



Question: 55

Shade the like terms.



Answer:

Given terms are _____.

Two or more term have _____ (same/ different) variables is called like terms.

Here, like terms are _____.

Question: 56

Complete the expression $7r^2 + r \square - 2 \square = \underline{\hspace{1cm}} r^2$

Answer:

_____ (Like / Unlike) terms can be added or subtracted.

$$7r^2 + r \square - 2\square = (7 + \underline{\hspace{1cm}} - 2)r^2 = \underline{\hspace{1cm}}$$

Question: 57

Sam have 3a chocolates and 9y icecream. Ram have 7a chocolates and 5y icecream.

(i) Total chocolates Ram and Sam have : _____.

(ii) How many icecreams Sam have more than Ram : _____ .

Answer:

	Chocolates	Icecream
Sam		
Ram		

(i) Total chocolates Ram and Sam have :

Ram's chocolate + Sam's chocolates = _____ + _____ = _____

(ii) How many icecreams Sam have more than Ram :

_____ icecream - _____ icecream = _____ - _____ = _____

Hi, here in this video you will learn **Subtraction on expression**



Question: 58

Find the sum of two expressions $a + b + c$ and $b + c + d$

Answer:

The given two expressions are _____ and _____.

The two terms will get added only if they are _____(Like/ Unlike) terms.

The sum of two expressions = _____ + _____.

The answer is _____

Question: 59

	School A	School B
Number of boys	100b	250b
Number of girls	150g	200g
Number of teachers	25t	45t

(i) Total number of boys in school A and B is _____

(ii) Total number of students in school B is _____

(iii) How many more teachers are there in school B than school A ? _____

Answer:

- Question: 60*

$$\begin{array}{r} 13x + ______ \\ (+) 12x + 10y \\ \hline ______ + 25y \end{array}$$

$$\begin{array}{r} 3a - 5b \\ (-) \quad 5a - 7b \\ \hline -2a - \underline{\hspace{1cm}} \end{array}$$

$$\begin{array}{r} 13x + ______ \\ (+) 12x + 10y \\ \hline ______ + 25y \end{array}$$

$$\begin{array}{r} 3a - 5b \\ (-) \quad 5a - 7b \\ \hline -2a - \underline{\hspace{1cm}} \end{array}$$



Question: 61

Substituting the value in the expression $= 5(\underline{\hspace{1cm}}) + 5 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$.

Question: 62

$$7 \square + 3 = -4$$
$$7 \times \underline{\quad} + 3 = \underline{\quad}$$

$$7 \times \underline{\quad} + 3 = \underline{\quad}$$

$$7 \times \underline{\quad} + 3 = \underline{\quad}$$

$$7 \times \underline{\hspace{1cm}} + 3 = \underline{\hspace{1cm}}$$

$$7 \times \underline{\hspace{1cm}} + 3 = \underline{\hspace{1cm}}$$

Therefore, is the number that can be placed in a box to make the equation correct.

Question: 63

Arrange the terms in the descending order when the value of x is 2.

$$2x \qquad 5x \times 1 \qquad x + 3 \qquad 2x - 4 \qquad \frac{1}{2}x$$

Answer:

The given expression are .

The value of x is .

substituting value of x

$$2x = 2 \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$2x - 4 = 2 \times \underline{\hspace{1cm}} - 4 = \underline{\hspace{1cm}}$$

$$x + 3 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\frac{1}{2}x = \frac{1}{2} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$5x \times 1 = 5 \times \underline{\hspace{1cm}} \times 1 = \underline{\hspace{1cm}}$$

Arranging in descending order: , , , , .

Their respective algebraic terms are , , , , .