

LaPIS Diagnostic Test Workbook - Mathematics

Name : Dharshana Bala A

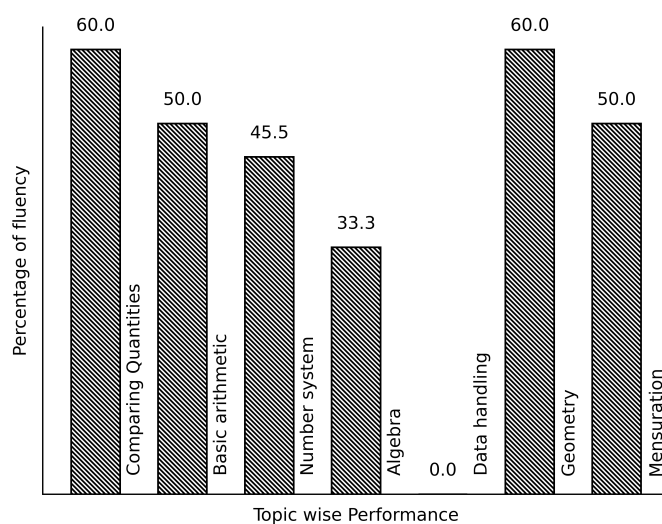
Class : 7

Section : B

School : AKV Public School

Login ID : AKV137

Dharshana Bala A's Performance Report



Score: 18/40

Percentage: 45.0%

Dharshana Bala A'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.



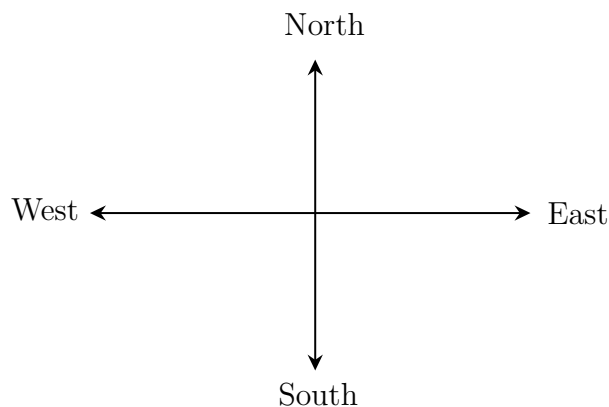
Answer:

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

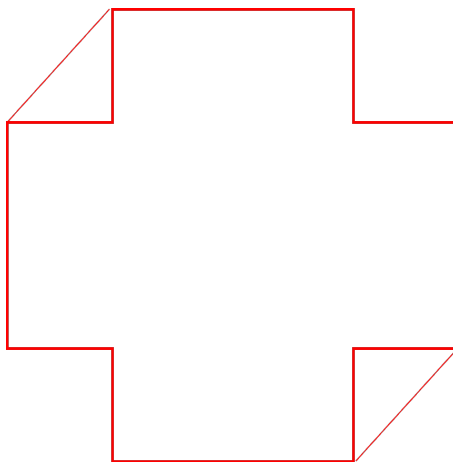
Topics to be Improved	
Perimeter	Perimeter of triangle

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



Question: 4

Highlight the perimeter in the given image.

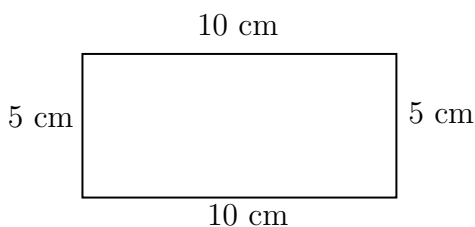


Answer:

Perimeter is the _____ (outer / inner) boundary of the shape

Question: 5

Find the perimeter of the given figure.



Answer:

Sides of the given shape = _____.

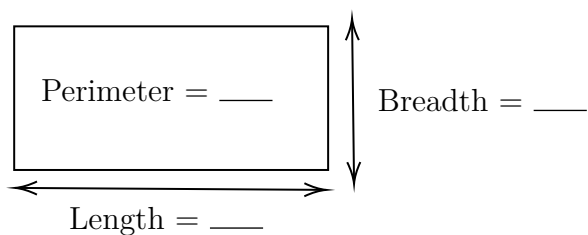
Perimeter of a shape is _____ (sum / difference) of _____ (all/ opposite) sides.

Perimeter of the given shape = _____

Question: 6

Find the length of the rectangular floor if its perimeter is 60 ft and breadth is 3 ft.

Answer:



Shape of the floor is _____ and its perimeter formula is _____.

Given:

floor perimeter = _____, and breadth = _____.

Perimeter of the floor = $2(\text{_____} + \text{_____})$.

Therefore, length of the rectangular floor is _____.

Data handling

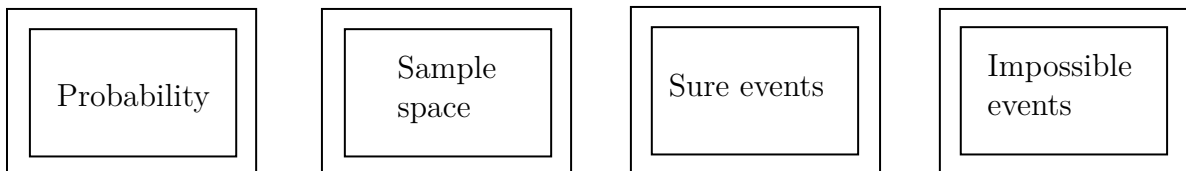
Topics to be Improved	
Chance of probability	Sample space in probability, Basis of probability
Range	Finding the range
Arithmetic mean, mode and median	Mean, Median and Mode

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.

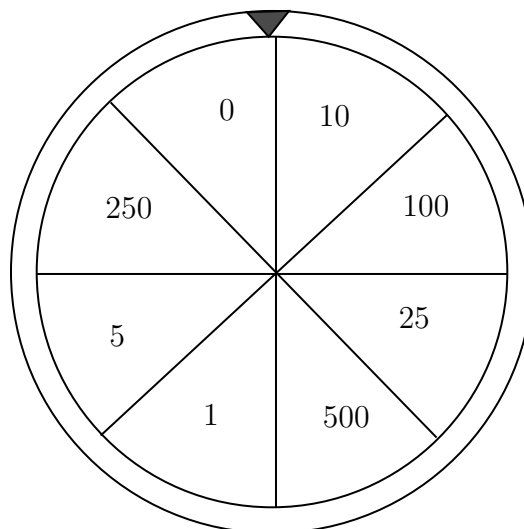
Sure events always _____ (occurs/don't occurs).

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 + _____ ,

_____ + _____, _____ + _____,

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)

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



Question: 13

Range of the data = _____ - _____

Answer:

The difference between highest value and lowest value is _____.

Example: Find the range of 10, 5, 30, 23, 54, 39 and 16

Highest value = _____ , Lowest value = _____ .

Range = _____ - _____ = _____.

Question: 14

Circle the correct range for the following data 31, -20, 35, -38, 29, 0, 43, -25, 51, 14, 9

$$-20 + 51$$

$$\frac{-38-51}{2}$$

$$51 + 38$$

$$\frac{51+20}{2}$$

Answer:

Range = _____ - _____.

Arranging the data in ascending order, _____

In the given data,

Highest value = _____ , Lowest value = _____ , Range = _____ - _____ = _____

Question: 15

Find the range of first 10 multiple of 5.

Answer:

First 10 multiple of 5 = _____

Therefore,

Highest value = _____ , Lowest value = _____ , Range = _____ - _____ = _____

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



Question: 16

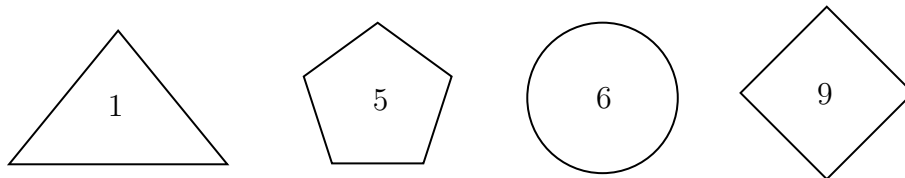
Find the mode of the following data: 5, 15, 23, 5, 32, 44, 72, 55, 6, 3, 5, 65, 45, 67, 24, 19 and 98.

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: 17

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: 18

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

Therefore, mean = _____

Arrange the data in ascending order : _____

Here, median = _____ , mode = _____.

Geometry

Topics to be Improved	
Types of triangle	Basics of types of triangle (sides)
Sum of lengths of two sides of a triangle	Sum of two sides of a triangle
Right angle triangle and pythagoras property	Basics of Pythagoras property
Criteria for congruence of triangle	Identification of criteria of congruence of triangles

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



Question: 19

Polygon with three sides is called as _____.

Answer:

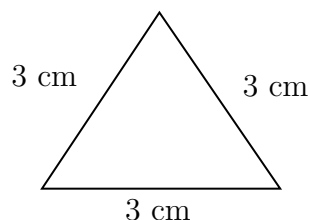
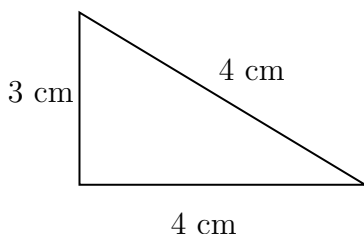
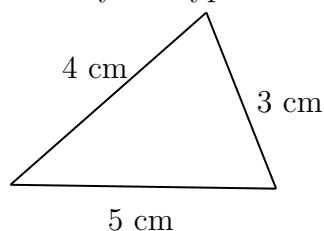
A polygon is a simple _____ (open / closed) curve made up of only line segments.

Polygon with three sides is called _____.

Draw a diagram of polygon with three sides :

Question: 20

Identify the types of triangles.



Answer:

Triangle has _____ sides.

- Triangle with all sides are equal is called _____ triangle.

- Triangle with two sides of equal length is called _____ triangle.
- Triangle with three sides of different length is called _____ triangle.

Question: 21

A park is in the shape of an isosceles triangle. If side length of the park is 30ft and 60ft. then the possible length of third side of park can be _____.

Answer:

The shape of the park is _____ .

The shapes has _____ sides and this shape has _____ sides of equal length.

Given: length of sides of park is _____.

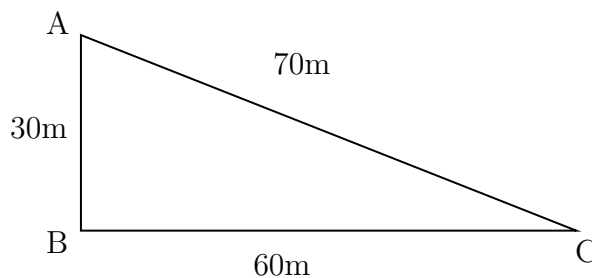
The possible length of third side is _____.

Hi, here in this video you will learn **Sum of the length of sides of the triangle**



Question: 22

Find the greatest distance to reach C from A in the given diagram.



Answer:

The sides of the given triangle are _____.

The possible way to reach point C from point A are _____ and AB then to

Side AC = _____

Side AB + BC = _____ + _____ = _____

Therefore, the greatest distance to reach C from A in the given diagram is _____.

Question: 23

_____ (Sum of / Difference between) the length of any two sides of a triangle is smaller than the length of the third side.

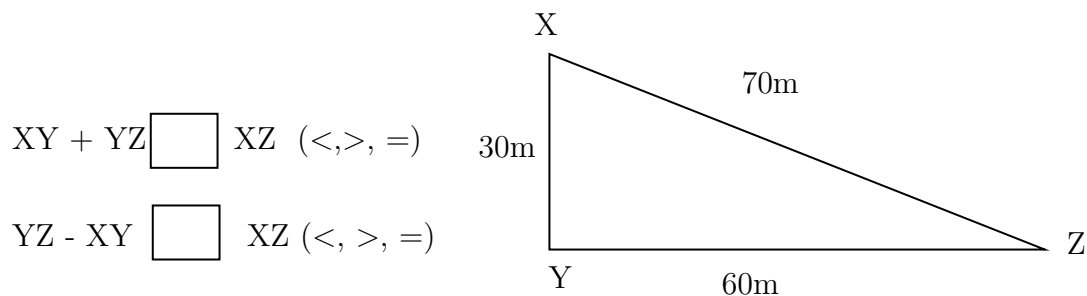
Answer:

There are _____ sides in a triangle.

The sum of the two sides of a triangle is _____ than the other side of the triangle.

The difference of the two sides of a triangle is _____ than the other side of the triangle.

Example: In triangle XYZ,



Question: 24

The lengths of two sides of a triangle are 7 cm and 10 cm. Between which two numbers can length of the third side fall?

Answer:

- The sum of the two sides of a triangle is _____ than the third side of the triangle.
 Therefore, the third side should be _____(less/ greater) than sum of other two sides.
 Here, sum of the two sides = _____ + _____ = _____
 Therefore, the length of the third side is less than _____
- The difference of the two sides of a triangle is _____ than the third side of the triangle.
 Therefore, the third side should be _____(less/ greater) than sum of other two sides.
 Here, difference of the two sides = _____ - _____ = _____
 Therefore, the length of the third side is greater than _____

Therefore, length of the third side is greater than _____ but less than _____.

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



Question: 25

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

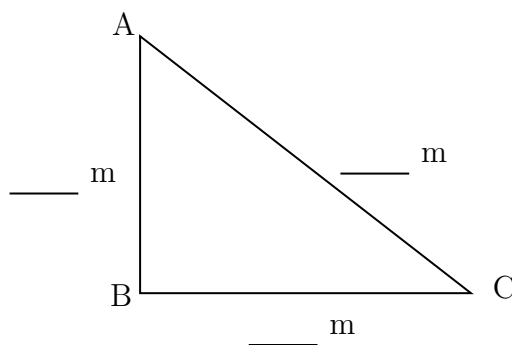
Answer:

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: 26

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.

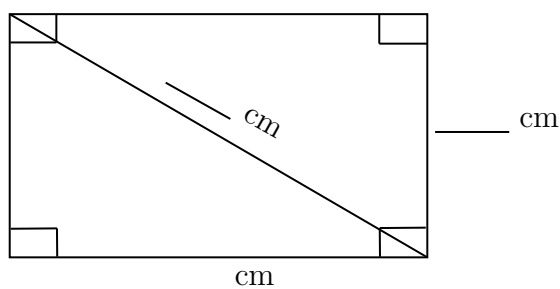
By Pythagoras theorem, $(\text{_____})^2 = (\text{_____})^2 + (\text{_____})^2$
 $\text{_____} = \text{_____} + \text{_____}$

Therefore, hypotenuse of the triangle is _____.

Question: 27

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, $(\text{_____})^2 = (\text{_____})^2 + (\text{_____})^2$
 $\text{_____} = \text{_____} + \text{_____}$

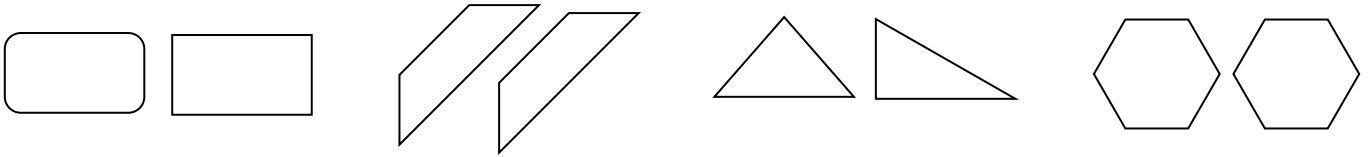
Therefore, diagonal of the rectangle is _____

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



Question: 28

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: 29

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:

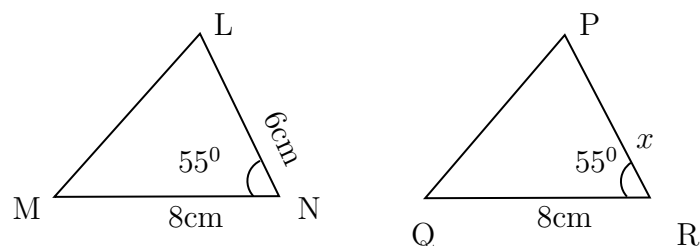
Two triangle are _____ (congruent/not congruent) if they are identical in shapes and size.
Criteria for congruence of triangles are SSS, _____ and _____.

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: 30

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 $PR =$ _____

Number system

Topics to be Improved	
Operations on rational numbers	Subtraction of rational numbers, Division of rational numbers
Exponents	Solving exponents
Properties of integers	Associative property
Positive and negative rational numbers	Identification of positive rational numbers
Introduction to rational numbers	Basics of rational numbers

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



Question: 31

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

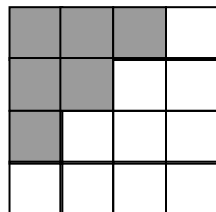
Answer:

Fractions with same denominators are called _____ (like/ unlike) fractions.
 Fraction can be added only if they are _____ (like/ unlike) fractions.

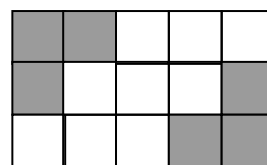
$$\frac{-3}{3} + \frac{1}{3} = \frac{\quad}{3} =$$

Question: 32

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 = _____.

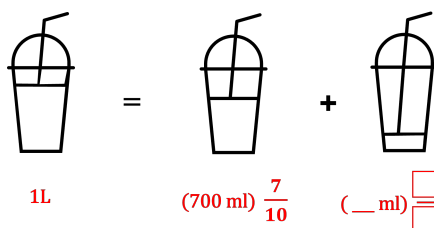
Number of shaded square in box B = _____.

Shaded part of box B in fraction = _____.

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

Question: 33

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 _____.

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 = _____.

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

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,

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

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

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

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 = _____.
 $(-2)^3 = \text{_____} \times \text{_____} \times \text{_____} = \text{_____}$.

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 = $(\text{Base})\text{---}$

- (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 **Properties of integers**



Question: 40

Match the following based on the properties of integers

i	Closure
ii	Associative
iii	Commutative
iv	Identity

a	$(5 + 7) + 3 = 3 + (7 + 5)$
b	$21 + 0 = 21$
c	$15 + 17 = 32$
d	$1 + 99 = 99 + 1$

Answer:

- (i) Closure property :
 The sum of integers is always _____(integer / not a integer).
 Therefore, _____ + _____ = _____
 From the given option _____ satisfies the closure property.
- (ii) Associative property :
 Rearranging the parentheses (brackets) _____ (does not/ does) change the sum.
 Therefore, $(a + b) + c =$ _____.
 From the given option _____ satisfies the Associative property.
- (iii) Commutative property :
 Changing the order of the addends _____ (does not/ does) change the sum.
 Therefore, $a + b =$ _____ + _____
 From the given option _____ satisfies the Commutative property.
- (iv) Identity property : The sum of _____ and any number always returns same number.
 Therefore, $a +$ _____ $= a$
 From the given option _____ satisfies the Identity property.

Question: 41

Mark the operations in which commutative property holds true for any two integers.

Addition Subtraction Multiplication Division

Answer:

In commutative property, changing the _____ (order/ brackets) of the operands _____ (does not/ does) change the result.
 For any two integers, commutative property holds true for _____.
 The commutative property for addition is _____.
 The commutative property for multiplication is _____.

Question: 42

Are additive identity and multiplicative identity the same? (Yes or No)

Answer:

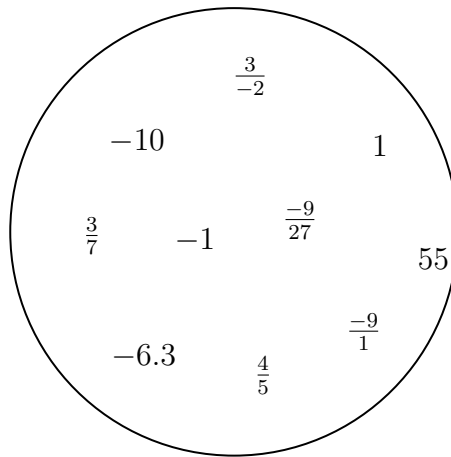
Identity property holds only for _____ , _____
 The Identity property for addition is _____ and additive identity is _____.
 The Identity property for multiplication is _____ and multiplicative identity is _____.
 Therefore, additive identity is _____ (equal / not equal) to multiplicative identity.

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



Question: 43

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: 44

$\frac{-3}{-4}$ 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: 45

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: _____

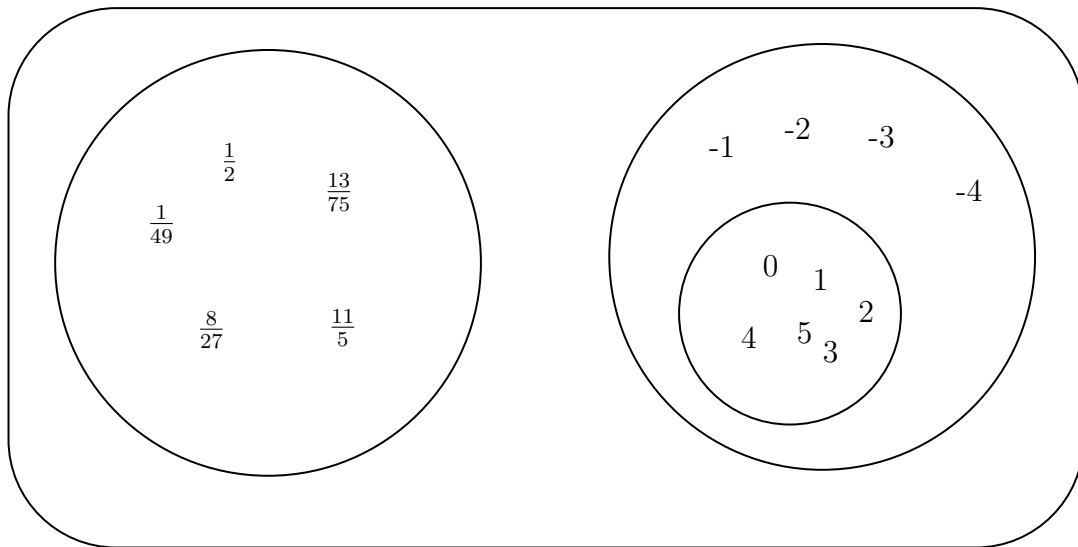
Positive rational number \times Negative rational number = _____ \times _____ = _____ and this is _____ rational number

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



Question: 46

The numbers in the diagram represents _____.



Answer:

0, 4, 5, 2, 3, 1 are _____ numbers.

-1, -2, -3, -4 are _____ numbers.

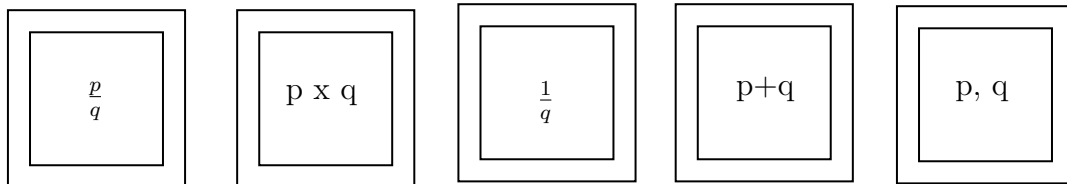
The combination of these circles are called _____.

$\frac{1}{49}$, $\frac{1}{2}$, $\frac{8}{27}$, $\frac{11}{5}$, $\frac{13}{75}$ are _____.

Combination of all three circles are called as _____ numbers.

Question: 47

Shade the correct form of rational numbers.



Answer:

Rational number can be expressed as _____, where both numerator and denominator are _____ (integer/ not a integer),

denominator is equal to _____ (zero/ one/ any integer other than zero).

Question: 48

Circle the number which is not a rational number.

$\frac{-5}{-8}$ $\frac{-3}{2}$ $\frac{12}{-6}$ $\frac{0}{-9}$ 256 $\frac{4}{0}$

Answer:

Rational number can be expressed as _____, where both numerator and denominator are _____ (integer/ not a integer), denominator is equal to _____ (zero/ one/ any integer other than zero).

Here, _____ is/are rational number and _____ is/are not a rational number.

Comparing Quantities

Topics to be Improved	
Conversion of fraction into percentage	Conversion of fraction into percentage
Percentage	Basic of percentage

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



Question: 49

Complete the box in the given equation.

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

Answer:

Percentage are the fraction with the denominator _____.

Therefore, 5% can be expressed as _____

Question: 50

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) $\frac{1}{2} \times 100 = \frac{100}{2} = 50\%$

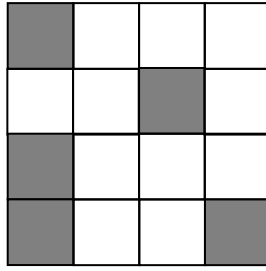
Answer:

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: 51

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 , $\frac{\square}{\square} \times 100$

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



Question: 52

2% can be written as

Answer:

Percentages are numerators of fractions with denominator_____

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

Question: 53

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 _____

$$\text{Then the mark scored by Arun} = \text{Total mark} \times 75\% = \underline{\hspace{2cm}} \times \frac{\boxed{}}{\boxed{}} = \underline{\hspace{2cm}}$$

Question: 54

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 _____ .

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

$$\text{Convert it into a percent} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}\% = \underline{\hspace{2cm}}$$

Algebra

Topics to be Improved	
Basics of simple equation	Solving of simple equation
subtraction of algebraic expressions	subtraction of algebraic expressions
Monomials, binomials, trinomials and polynomials	Types of algebraic expression
Addition and subtraction of algebraic expressions	Like terms and Unlike terms

Hi, here in this video you will learn **Solving an equation**



Question: 55

If $\odot = 5$, then $5 \odot + 5 = \underline{\hspace{2cm}}$

Answer:

The value of the given smiley \odot is $\underline{\hspace{2cm}}$.

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

Question: 56

Which of the following number can be placed in the box to make the equation correct (-2, -1, 0, 1, 2)

$$7 \square + 3 = -4$$

Answer:

The given equation is $7\underline{\hspace{1cm}} + 3 = -4$ Substitute the values (-2, -1, 0, 1, 2) in the circle,

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

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

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

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

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

Therefore, $\underline{\hspace{1cm}}$ is the number that can be placed in a box to make the equation correct.

Question: 57

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

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

Answer:

The given expression are _____.

The value of x is _____.

substituting value of x

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

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

$$x + 3 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

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

$$5x \times 1 = 5 \times \underline{\hspace{2cm}} \times 1 = \underline{\hspace{2cm}}$$

Arranging in descending order: _____, _____, _____, _____, _____.

Their respective algebraic terms are _____, _____, _____, _____, _____.

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:

(i) Number of boys in school A = _____,

Number of boys in school B = _____.

Total number of boys in school A and school B is _____ + _____ = _____.

- Question: 60*

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

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

$$\begin{array}{r} 13x + \underline{\hspace{1cm}} \\ (+) 12x + 10y \\ \hline \hspace{1cm} + 25y \end{array}$$

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



Question: 61

Therefore, there are _____ terms in the expression.

Question: 62

1. The terms in expression $8x^2 + 0$ are _____.
Here, expression has _____ term and it is a _____.

- The terms in expression $7xy + 4m$ are _____.
Here, expression has _____ term and it is a _____.
- The terms in expression $7m + n + 2$ are _____.
Here, expression has _____ term and it is a _____.

Question: 63

$5m^2 + m + 0$ is a _____ expression. (Monomial/ Binomial/ Trinomial)

Answer:

The terms in expression $5m^2 + m + 0$ are _____.

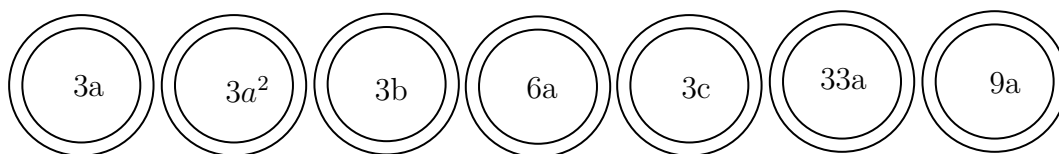
Here, the expression has _____ terms and it is called a _____ expression.

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



Question: 64

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: 65

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

Answer:

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

$$7r^2 + \boxed{} - 2\boxed{} = (7 + \underline{} - 2)r^2 = \underline{}$$

Question: 66

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 = _____ - _____ = _____