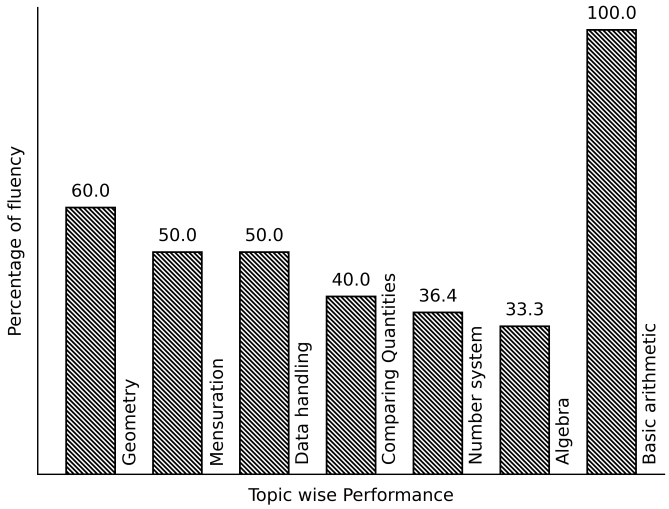
LaPIS Diagnostic Test Workbook - Mathematics

Name	**:**	**Sugesh V**
Class	**:**	**7**
Section	**:**	**C**
School	**:**	**AKV Public School**
Login ID	**:**	**AKV181**

Sugesh V's Performance Report



Score: 19/40 **Percentage: 47.5%**

Sugesh V's Study Planner

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

Teacher's Feedback to Student

Class Teacher Signature

Principal Signature

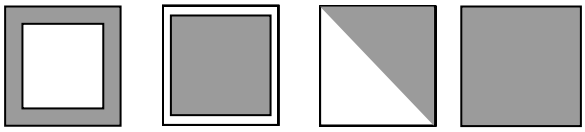
Mensuration

Topics to be Improved	
Area	Area of rectangle

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

Question: 1 .....

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



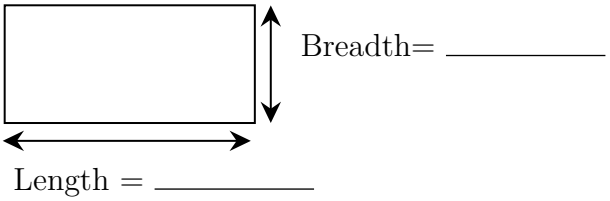
Answer:

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

Question: 2 .....

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

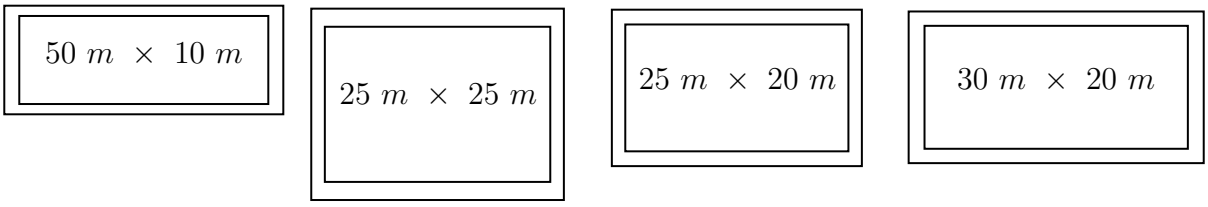
Answer:



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: 3 .....

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	
Chance of probability	Basis of probability
Arithmetic mean, mode and median	Mean, Median and 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 **Mean, Median, Mode**

Question: 7 .....

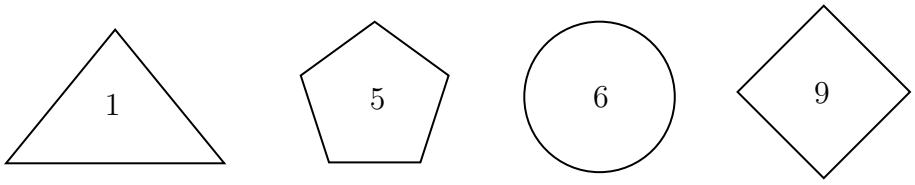
Find the mode of the following data: 5, 15, 23, 5, 32, 44, 72, 55, 6, 3, 5, 65, 45, 67, 24, 19 and 98.

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 = $\frac{\text{\_\_\_\_\_ of all observation}}{\text{number of obserivation}}$.

Here s sum of all observation = _____ , number of observation = _____
Therefore, mean = _____
Arrange the data in ascending order : _____
Here, median = _____ , mode = _____.

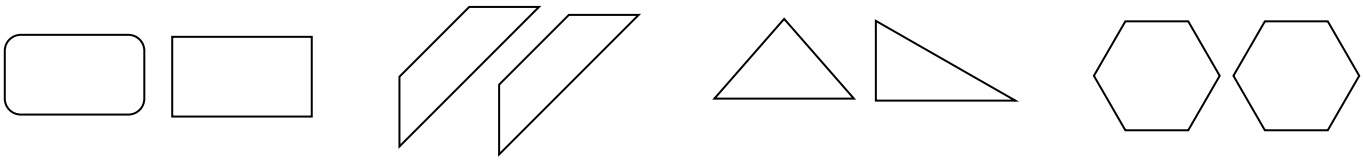
Geometry

Topics to be Improved	
Criteria for congruence of triangle	Idenfication of criteria of congruence of triangles
Transversal angle made by transversal	Basics of Transversal angle
Right angle triangle and pythagoras property	Basics of Pythagoras property
Related angles	Complementary angles

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

Question: 10 .....

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: 11 .....

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 _____.

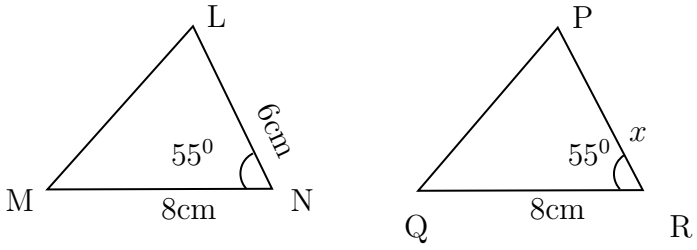
1. In SSS Congruence criteria - ___ (2/ 3/ 5) sides of the triangle are _____ (equal/ not equal) to the three corresponding sides of the other triangle.
2. In SAS Congruence criteria - ___(2/ 3/ 5) sides and _____ (one/two) angle between them are equal to the corresponding sides and the included angle 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: 12 .....

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



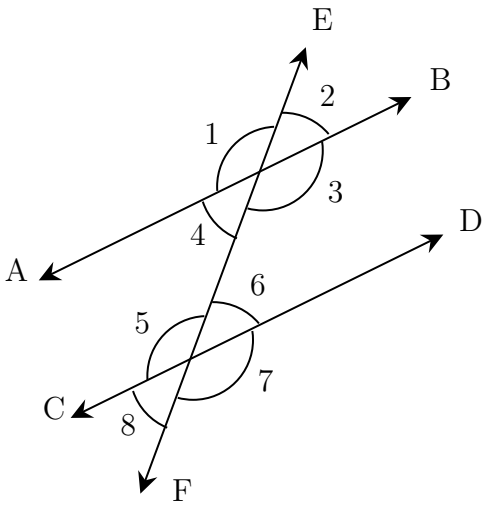
Answer:

The given two triangles satisfy _____ criteria of congruence.
By SAS congruence criteria, MN = _____ , _____ and $\angle N$ = _____
The side MN=8 cm in ΔLNM 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 _____ ΔLNM.
Therefore, length of side PR = _____

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

Question: 13 .....

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

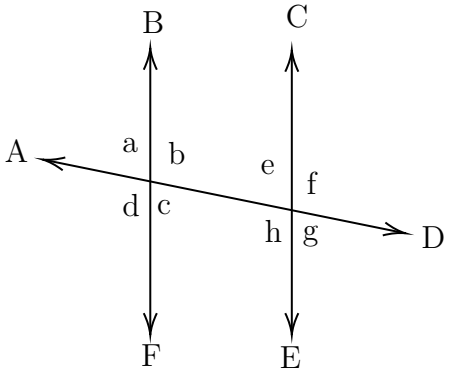


Answer:

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, ∠1 and ∠7 are _____

Question: 14 .....

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



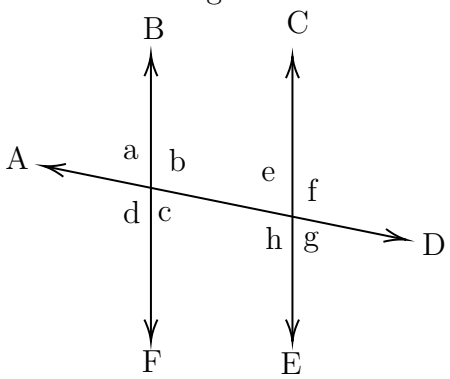
Answer:

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
∠a and ∠g , ∠b and ∠h,	∠a and ∠e, ∠b and ∠f,

Question: 15 .....

Find ∠e and ∠g if ∠a = 30°.



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 ∠a is _____ and its value is _____.
Corresponding angle of ∠a is _____ and its value is _____.

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

Question: 16 .....

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

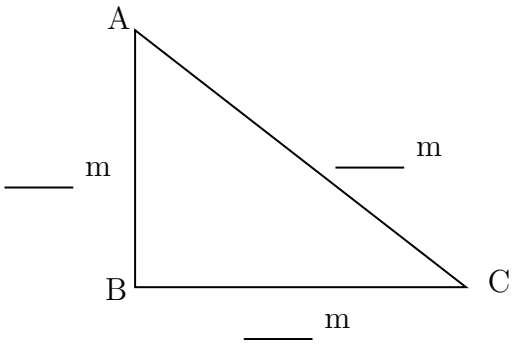
Answer:

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: 17 .....

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, (_____)^2 = (_____)^2 + (_____)^2

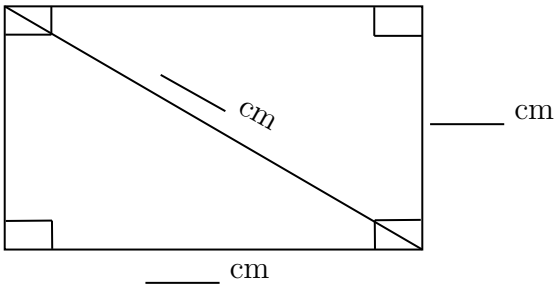
_____ = _____ + _____

Therefore, hypotenuse of the triangle is _____.

Question: 18 .....

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, (_____)^2 = (_____)^2 + (_____)^2

_____ = _____ + _____

Therefore, diagonal of the rectangle is _____

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

Question: 19 .....

1. Two angles are complementary if their sum is equal to _____.
2. Two angles are supplementary if their sum is equal to _____.

Answer:

1. When sum of the two angles is equal to 90°, they are called as _____ angle.
   Example : 45° and 45°, _____, and _____.

2. When sum of the two angles is equal to 180°, they are called as _____ angle.
   Example : 90° and 90°, _____, and _____.

Question: 20 .....

Shade the complementary angles.

85°, 95°	45°, 45°	6°, 84°	73°, 107°	36°, 64°	90°, 90°

Answer:

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

85°+ 95° = _____ and this is _____ (a / not a) complementary angles.
45°+ 45° = _____ and this is _____ angles.
6° + 84° = _____ and this is _____ angles.
73° + 107° = _____ and this is _____ angles.
36° + 64° = _____ and this is _____ angles.
90° + 90° = _____ and this is _____ angles.

Question: 21 .....

Find the complement and supplement of 15° and 90°

Answer:

One angle is _____ (complements / supplements) to other angle, when sum of the two angles is equal to 90°.
One angle is _____ (complements / supplements) to other angle, when sum of the two angles is equal to 180°.

Complement of 15° = _____, Complement of 90° = _____.
Supplement of 15° = _____, Supplement of 90° = _____

Number system

Topics to be Improved	
Properties of integers	Associative property
Exponents	Solving exponents
Fractions	Division of fraction, Multiplication of fractions
Decimals	Multiplication and division of decimals
Operations on rational numbers	Subtraction of rational numbers
Positive and negative rational numbers	Identification of positive rational numbers

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

Question: 22 .....

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: 23 .....

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: 24 .....

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 **Exponents and power**

Question: 25 .....

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 × _____ × _____
10 is raised to the power of ___ = $(10)^{\_\_}$

Question: 26 .....

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 = ___.
$(-2)^3$ = ___ × ___ × ___ = ___.

Question: 27 .....

(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 = $(Base)^{\text{___}}$

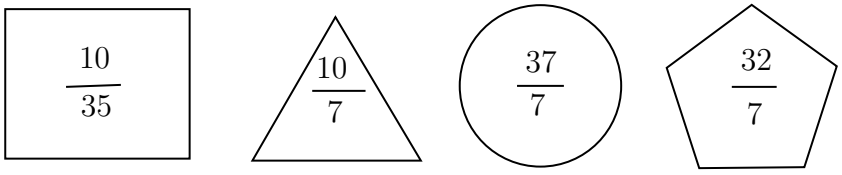
(i) Tenth power of 100 : Base = ___, Power/Exponents = ___, exponential form = ___.

(ii) k is raised to the power of 5 : Base = ___, Power/Exponent = ___,
exponential form = ___.

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

Question: 28 .....

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, $\frac{(\text{ Whole} \times \text{\_\_\_\_\_}) + Numerator}{Denominator}$

$$5\ \frac{2}{7} = \frac{(\ \text{\_\_\_} \times \text{\_\_\_}\ ) + \text{\_\_\_\_\_}}{7} = \frac{\square}{\square}$$

Question: 29 .....

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 = _____.

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

Question: 30 .....

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

Answer:

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

$$\frac{12}{40} \div \_\_\_\_ = \frac{12}{40} \times \frac{\square}{\square} = \frac{\square}{\square}$$

Then the answer is _____

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

Question: 31 .....

Shade 0.4 part of the given shape.

Answer:

There are _____ boxes.
0.4 can be expressed as _____ in fraction
This fraction represents _____ parts out of _____equal parts.
So, we need to shade _____ boxes out of _____boxes.

Question: 32 .....

Solve the following.

(i) 0.4×1.2

(ii) 0.48×1.2

Answer:

(i) 0.4×1.2 :
Multiplication of 0.4×1.2 assuming there is no decimal point is _____.
The number of digits after decimal point in 0.4 is _____ and 1.2 is _____.
Total digits after decimal point in the product of two numbers is _____.
Count that digits from the right towards left and place the decimal point, the result is _____.

(ii) 0.48×1.2:
Multiplication of 0.48×1.2 assuming there is no decimal point is _____.
The number of digits after decimal point in 0.48 is _____ and 1.2 is _____.
Total digits after decimal point in the product of two numbers is _____.
Count that digits from the right towards left and place the decimal point, the result is _____.

Question: 33 .....

One box of chocolate costs Rs.20.10. What is the cost of 15 chocolates, if a box contains 10 chocolates?

Answer:

One box contains _____ chocolates. The cost of one box is _____
Then cost of one chocolate = _____ ÷ _____= _____

(i) Total digits after decimal point in decimal number = _____

(ii) Divide the two numbers assuming there is no decimal point.

$$\frac{2010}{15} = \text{\_\_\_\_\_}$$

(iii) Place the decimal point after _____ digits counting from the right in the quotient after division.

Then the cost of one chocolate is _____ .
The cost of 15 chocolates = cost of one chocolate × _____ = _____ x _____ = _____

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

Question: 34 .....

Fill the boxes

$$2 + 4 + \frac{6}{2} = \frac{2}{\square} + \frac{4}{\square} + \frac{3}{\square} = \frac{\square}{\square} = 9$$

Answer:

The whole number can be expressed in fraction with denominator equal to _____ (zero/one).
Therefore, 2 can be written as _____ in fraction.
4 can be written as _____ in fraction.

$$2 + 4 + \frac{6}{2} = \frac{2}{1} + \frac{4}{\square} + \frac{\quad}{\quad} = \frac{2}{1} + \frac{4}{\square} + \frac{3}{\square} = \frac{\square}{\square} = 9$$

Question: 35 .....

There are 400 students in a school. Find the number of girls, if three sixteenth of the students are girls.

Answer:

Total number of students = _____
Fraction of students who are girls = _____
Number of girls = $\frac{\square}{\square}$ × _____ = _____

Question: 36 .....

Solve : $2\frac{7}{4} \times \frac{2}{3}$

Answer:

$2\frac{7}{4}$ is a _____ (proper / mixed) fraction.
Here, 2 is _____, 7 is _____ and 4 is _____.

To convert mixed fraction into improper fraction, $\frac{(\text{ Whole} \times \_\_\_\_\_) + Numerator}{Denominator}$
Improper fraction of $2\frac{7}{4}$ = _____

$$2\,\frac{7}{4} \times \frac{2}{3} = \frac{\square}{\square} \times \frac{2}{3} = \frac{\square}{\square}$$

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

Question: 37 .....

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

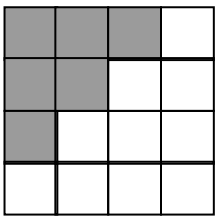
Answer:

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

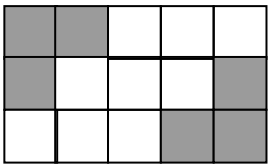
$$\frac{-3}{3} + \frac{1}{3} = \frac{\quad}{3} =$$

Question: 38 .....

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



A



B

Answer:

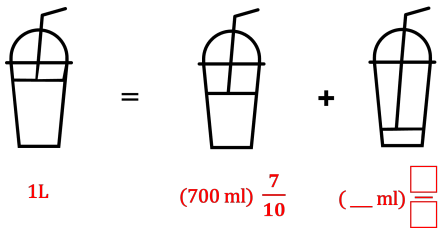
Total number of square in box A = _____.
Number of shaded square in box A = _____
Shaded part of box A in fraction = _____

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: 39 .....

Find the missing values in the given figure.



Answer:

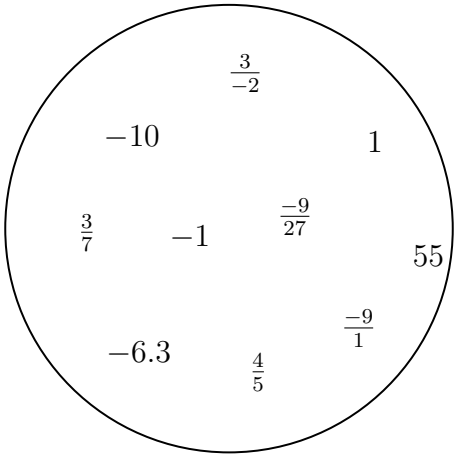
One litre = _____ ml
$\frac{7}{10}$ of one liter = $\frac{7}{10}$ x ___ ml = ___ ml

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 **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 $\frac{\text{-3}}{\text{-4}} = \frac{\square}{\square}$ 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

Comparing Quantities

Topics to be Improved	
Equivalent ratios	Basic of proportion
Conversion of fraction into percentage	Conversion of fraction into percentage
Percentage	Basic of percentage

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

Question: 43 .....

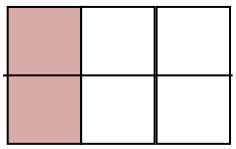
If a:b and c:d are equivalent ratio, then it can be expressed as _____

Answer:

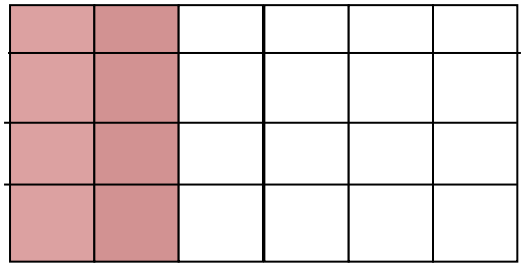
A _____ (proportion / ratio) is used to express _____ (one/two) equivalent ratios.
Standard form to express proportion is _____.

Question: 44 .....

Find the ratio of shaded part to unshaded part of A and B. Are the two ratios equivalent ?



A



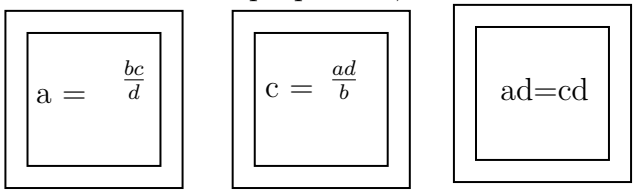
B

Answer:

Shaded part of A = _____, Unshaded part of A = _____.
Ratio of shaded to unshaded parts of A is _____. Fractional form = _____.
Shaded part of B = _____ ,
Unshaded part of B = _____.
Ratio of shaded to unshaded parts of B is _____.
Fractional form = _____.
Fraction form of A _____ (equal/ not equal) to Fraction form of B.

Question: 45 .....

If a : b :: c : d is proportion, shade the correct expression



Answer:

Two equivalent ratio which are proportion, it can be written as a : b :: c : d
or _____ = _____ (in fraction) .
First and fourth term are called _____ and second and third term are called _____.
In proportion, product of extreme terms is _____ (equal to/ not equal to) product of middle terms.
Therefore, a × d = _____,
then a = _____ and c = _____

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

Question: 46 .....

Complete the box in the given equation.

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

Answer:

Percentage are the fraction with the denominator _____.

Therefore, 5% can be expressed as _____

Question: 47 .....

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) $\frac{1}{2} \times \frac{100}{100} = \frac{100}{200} = 200\%$

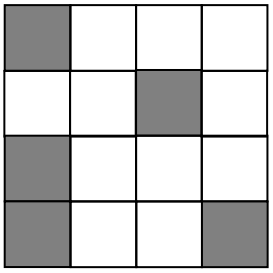
(iii) $\frac{1}{2} \times 100 = \frac{100}{2} = 50\%$

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: 48 .....

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 $\frac{\square}{\square}$

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

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

Question: 49 .....

2% can be written as

Answer:

Percentages are numerators of fractions with denominator_____

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

Question: 50 .....

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 $\frac{\square}{\square}$

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

Question: 51 .....

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

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

Algebra

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

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

Question: 52 .....

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: 53 .....

	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 _____ + _____ = _____.

(ii) Number of boys in school B = _____,
Number of girls in school B = _____.
Total number of students in school B is _____ + _____ = _____.

(iii) Number of teachers more in school B than school A = Teachers in school B − Teachers in school A = _____.

Question: 54 .....

Solve the following:

	$13x +$ ___			$3a - 5b$
(+)	$12x + 10y$		(-)	$5a - 7b$
	___ $+ 25y$			$-2a -$ ___

Answer:

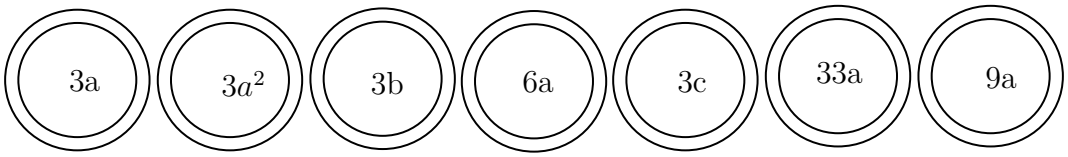
The two terms will get added only if they are _____ (like/unlike) terms.

	$13x +$ ___			$3a - 5b$
(+)	$12x + 10y$		(-)	$5a - 7b$
	___ $+ 25y$			$-2a -$ ___

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 $\square$ = ___r^2

Answer:

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

$$7r^2 + \text{r}\square - 2\square = \left(7 + \_\_\_ - 2\right) r^2 = \_\_\_\_\_$$

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 **Types of expression**

Question: 58 .....

There are _____ terms in the expression $7x + 3y + m + 5$.

Answer:

In algebraic expression, _____ (variables/ terms) are connected together with operations of addition.
The terms in the expression are _____ , _____ , _____ , and _____ .
Therefore, there are _____ terms in the expression.

Question: 59 .....

Classify the following expression into monomial, binomial and polynomial.

1. $7m + n + 2$
2. $8x^2 + 0$

3. $7xy + 4m$

Answer:

1. The terms in expression $8x^2 + 0$ are _____.
   Here, expression has _____ term and it is a _____
2. The terms in expression $7xy + 4m$ are _____.
   Here, expression has _____ term and it is a _____.
3. The terms in expression $7m + n + 2$ are _____.
   Here, expression has ____ term and it is a _____.

Question: 60 .....

$5m^2 + m + 0$ 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 **Solving an equation**

Question: 61 .....

If ☺= 5, then 5 ☺ +5 = _____

Answer:

The value of the given smiley ☺ is _____.
Substituting the value in the expression = 5(____) + 5 = _____ + _____ = _____.

Question: 62 .....

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____ +3 =-4 Substitute the values (-2, -1, 0, 1, 2) in the circle,
7× ____+3= ____
7× ____+3 = ____
7× ____+3 = ____
7× ____+3 = ____
7× ____+3 = ____
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.
$2x$ $5x \times 1$ $x + 3$ $2x - 4$ $\frac{1}{2}x$

Answer:

The given expression are _____.
The value of x is _____.
substituting value of x

$2x = 2\times$ _____ = _____ $2x - 4 = 2\times$ _____ - 4 = _____

$x + 3 =$ _____ = _____ $\frac{1}{2}x = \frac{1}{2} \times$ ___ = _____

$5x \times 1 = 5 \times$ _____ $\times 1 =$ _____

Arranging in descending order: ___, ___, ___, ___, ___.
Their respective algebraic terms are ___, ___, ___, ___, ___.