LaPIS Diagnostic Test Workbook - Mathematics

Name	:	**Anjanapriya D**
Class	:	**7**
Section	:	**B**
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Login ID	:	**AKV153**

Anjanapriya D's Performance Report

Topic wise Performance
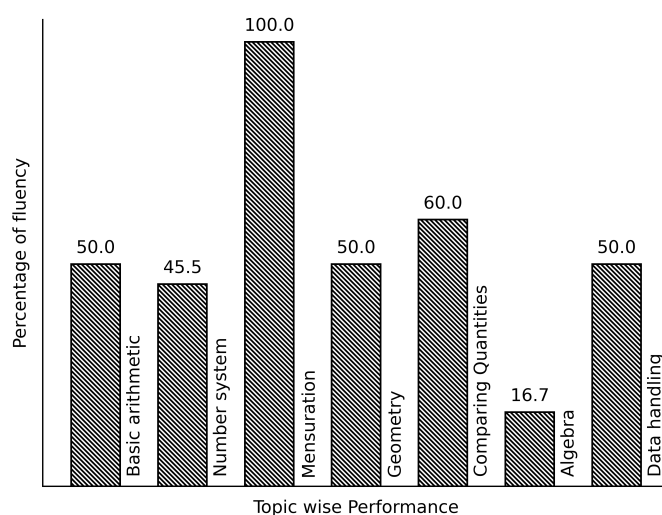
Score: 19/40　　　　**Percentage: 47.5%**

Anjanapriya D'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**
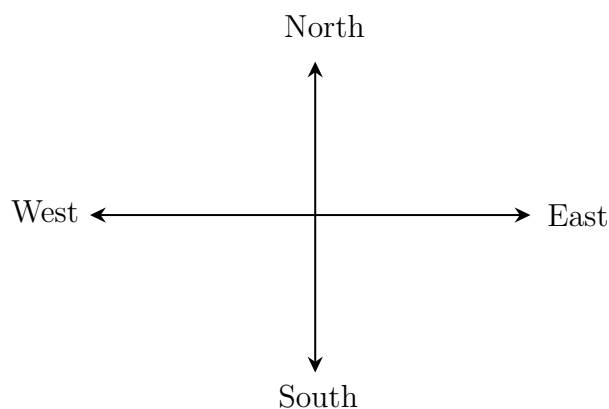
Question: 1

Find the angles.

The angle ranges from ___° to ___°.
The angle perpendicular to 0° is ___°.
The straight line measures ___°.

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.

Data handling

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

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

Question: 4 ....

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: 5 ....

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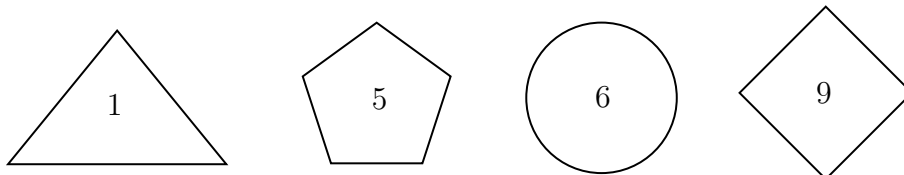
Answer:

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: 6 ....

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

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

Answer:

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

Here s 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: 7 ....

Which of the following contains list of all possible outcomes.

| Probability | Sample space | Sure events | Impossible events |

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.
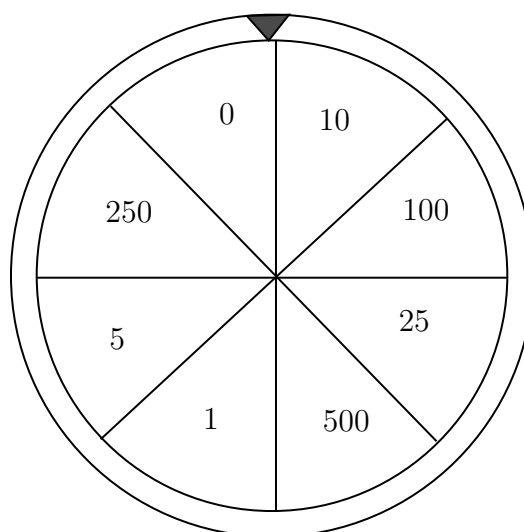
Answer:

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

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

Question: 9 ....

A bag contains three balss 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 + _____ ,

_____ + _____, _____ + _____,

Geometry

Topics to be Improved	
Related angles	Complementary angles
Faces vertex and edges	Idenfication of faces,edges and vertices
Transversal angle made by transversal	Basics of Transversal angle
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

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

Question: 10 ....

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: 11 ....

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: 12 . . . .

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° = _____

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

Question: 13 . . . .

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

Answer:

_____ has two end point (line/line segment/ray).

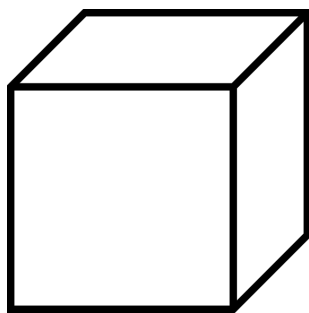A _____is a point where two or more line segments meet(Vertex/ edges/ faces).

Mark the vertices in the diagram,
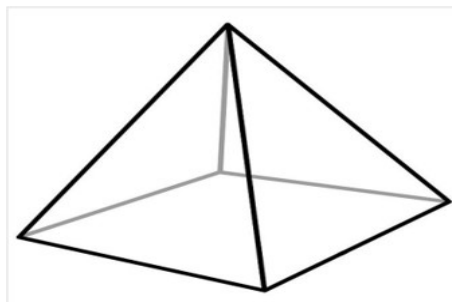
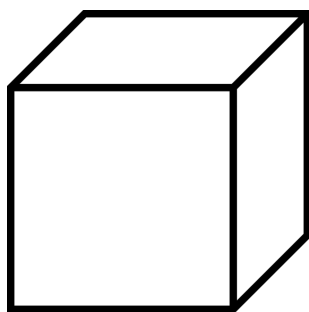## Question: 14

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: 15

How many vertices, edges and faces does dices have?

Answer:

The shape of dice is _____.

Dices have _____ vertices, _____ edges and _____ faces.

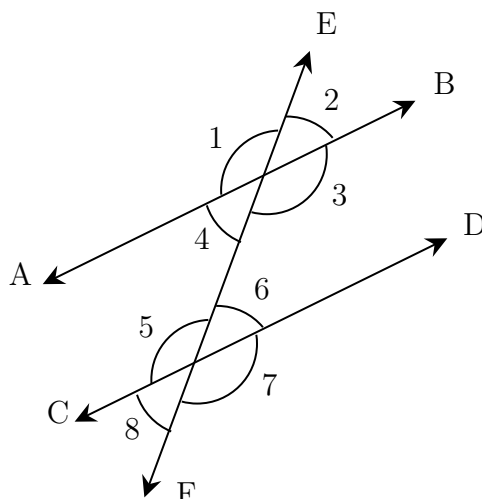### Question: 16 ....

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

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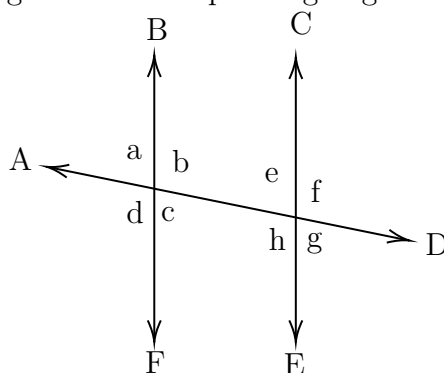
A line that intersects two or more lines at distinct points is called a _____ (transversal/ Intersecting line).

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: 17 ....

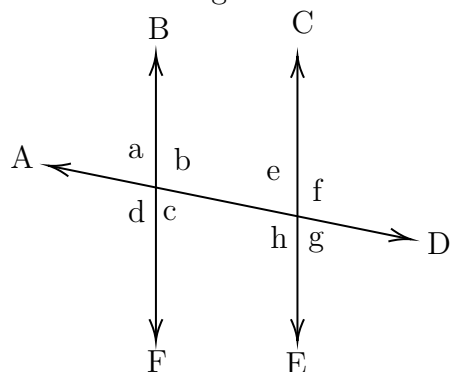Find the transversal, alternate angles and corresponding angles in a given diagram.

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: 18 ....

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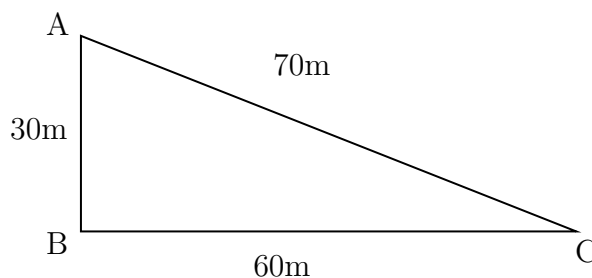Corresponding angle of ∠a is _____ and its value is _____.

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

Question: 19 ....

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: 20 . . . .

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

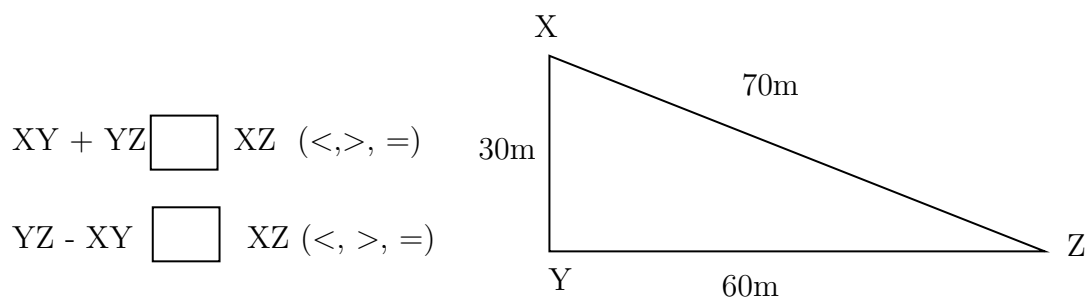### *Answer:*

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,

XY + YZ ☐ XZ $(<, >, =)$

YZ - XY ☐ XZ $(<, >, =)$

X
70m
30m
Y   60m   Z

Question: 21 . . . .

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:

1. 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 _____

2. 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: 22

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

Answer:

Pythagoras theorem is only applicable for _____ triangle.
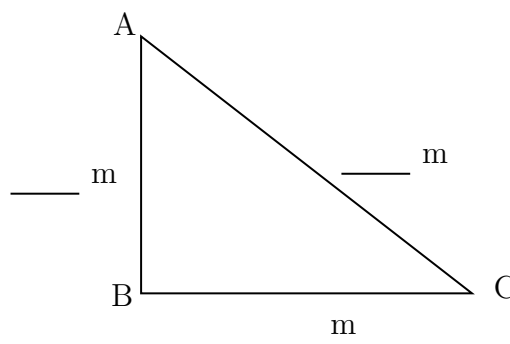
Longest side of the triangle is _____ (hypotenuse/ legs) and other two sides are called _____(hypotenuse/ legs).

Pythagoras theorem states that _____.

Question: 23

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

Answer:

A

_____ m   _____ m

B   _____ m   C

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.

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

Therefore, hypotenuse of the triangle is _____.

Question: 24

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

Answer:

_____ cm

_____ cm

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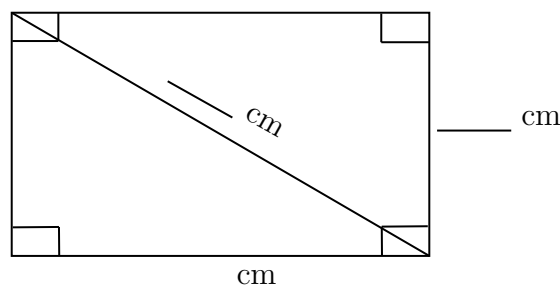
Pythagoras theorem states that square on the _____ = sum of the squares on _____.

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

Given: breadth = _____, length of diagonal = _____

By Pythagoras theorem, $(\underline{\hspace{2cm}})^2 = (\underline{\hspace{2cm}})^2 + (\underline{\hspace{2cm}})^2$

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

Therefore, diagonal of the rectangle is _____

Number system

Topics to be Improved	
Integers	Basics of integers
Exponents	Solving exponents
Positive and negative rational numbers	Identification of positive rational numbers
Fractions	Multiplication of fractions, Division of fraction
Properties of integers	Associative property

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

Question: 25 . . . .

Highlight the ring that contains whole numbers.
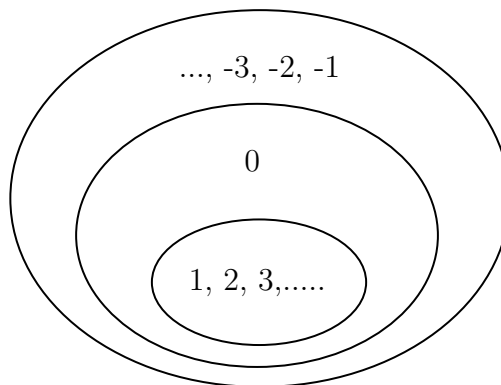
Answer:

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: 26 . . . .

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: 27 ....

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 **Exponents and power**

Question: 28 ....

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).

$$1000 \text{ can be written as} = 10 \times \text{_____} \times \text{\_\_\_\_\_}$$
$$10 \text{ is raised to the power of } \_\_\_ = (10)^{\text{---}}$$

Question: 29 ....

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.

$$\text{In this exponential form } (-2)^3 \text{ , base} = \text{\_\_\_, power} = \text{\_\_\_.}$$
$$(-2)^3 = \text{\_\_\_} \times \text{\_\_\_} \times \text{\_\_\_} = \text{\_\_\_.}$$

Question: 30 ....

(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 $= (Base)^{\overline{}}$

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

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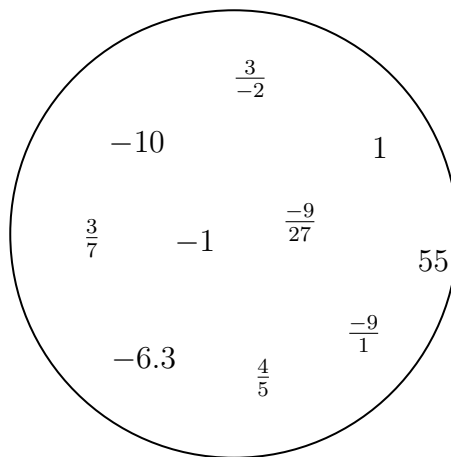   exponential form = ___.

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

Question: 31 . . . .

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: 32 . . . .

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

Answer:

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

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

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

Question: 33 ....

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

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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.

$$2 + 4 + \frac{6}{2} \; = \frac{2}{1} \; + \frac{4}{\square} \; + \text{——} = \frac{2}{1} \; + \frac{4}{\square} \; + \frac{3}{\square} = \frac{\square}{\square} = 9$$

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 = $\dfrac{\square}{\square}$ $\times$ _____ = _____

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, $\frac{(\text{Whole} \times \underline{\hspace{2cm}}) + \text{N}umerator}{\text{D}enominator}$

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 **Properties of integers**

Question: 37 ....

Match the following based on the properties of integers

i	Closure		a	$(5 + 7) + 3 = 3 + (7 + 5)$
ii	Associative		b	$21 + 0 = 21$
iii	Commutative		c	$15 + 17 = 32$
iv	Identity		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: 38 ....

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: 39 ....

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.
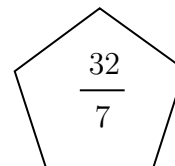

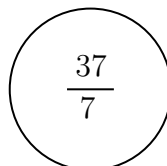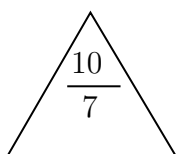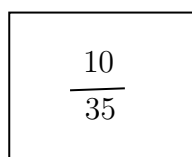Hi, here in this video you will learn **Division on fractions**

Question: 40 ....

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

$$\boxed{\frac{10}{35}} \qquad \triangle\frac{10}{7} \qquad \bigcirc\frac{37}{7} \qquad \pentagon\frac{32}{7}$$

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, $\dfrac{(\text{ Whole }\times \underline{\hspace{2cm}})+Numerator}{Denominator}$

$$5\,\frac{2}{7} \;=\; \frac{(\,\underline{\quad}\times\underline{\quad}\,)+\underline{\qquad}}{7} \;=\; \frac{\Box}{\Box}$$

Question: 41 ....

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: 42

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

Answer:

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

$$\frac{12}{40} \div \text{⎯⎯⎯} = \frac{12}{40} \times \frac{\square}{\square} = \frac{\square}{\square}$$

Then the answer is ⎯⎯⎯

Comparing Quantities

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

Hi, here in this video you will learn **Basics of proportion**
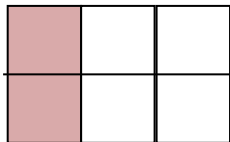
Question: 43 ....

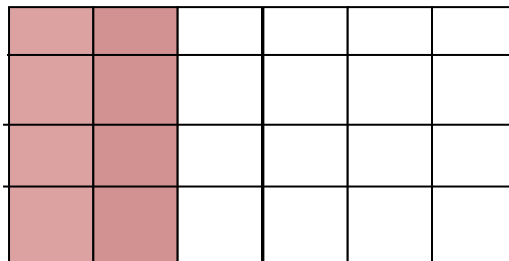If a:b and c:d are equivalent ratio, then it can be expressed as _____

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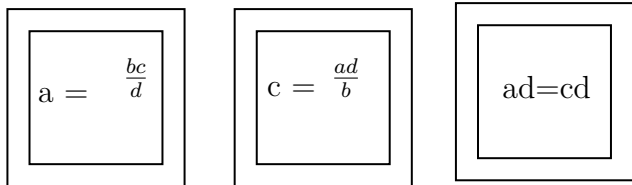Shaded part of B = _____ ,
Unshaded part of B = _____.
Ratio of shaded to unshaded parts of B is _____.
Fractional form = _____.
Fraction form of A _____ (equal/ not equal) to Fraction form of B.

Question: 45 ....

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

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$$a = \frac{bc}{d}$$

$$c = \frac{ad}{b}$$

$$ad=cd$$

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:

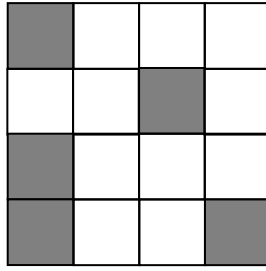To convert fraction into percentage, the value of _____ (denominator / numerator)should be 100 or _____ (multiply / divide) the fraction with 100 %.
Therefore, correct conversion form is _____

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 $\dfrac{\boxed{}}{\boxed{}}$

To Convert $\dfrac{\boxed{}}{\boxed{}}$ into percentage , $\dfrac{\boxed{}}{\boxed{}}$ x 100

Algebra

Topics to be Improved	
Basics of simple equation	Solving of simple equation, Formating of simple equation
subtraction of algebraic expressions	subtraction of algebraic expressions
Addition and subtraction of algebraic expressions	Like terms and Unlike terms
Terms of an expression	Identification of terms in an expression

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

Question: 49 . . . .

If ☺= 5, then 5 ☺ +5 = _____

Answer:

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

Question: 50 . . . .

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

$7 \boxed{} + 3 = -4$

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: 51 . . . .

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

$$2x = 2\times \underline{\hspace{1.5cm}} = \underline{\hspace{1.5cm}} \qquad 2x - 4 = 2\times \underline{\hspace{1.5cm}} \text{ - } 4 = \underline{\hspace{1.5cm}}$$

$$x + 3 = \underline{\hspace{1.5cm}} = \underline{\hspace{1.5cm}} \qquad\qquad \frac{1}{2}x = \frac{1}{2}\times \underline{\hspace{1cm}} = \underline{\hspace{1.5cm}}$$

$$5x \times 1 = 5 \times \underline{\hspace{1.5cm}} \times 1 = \underline{\hspace{1.5cm}}$$

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

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:

$$13x + \underline{\quad}$$
$$(+)\ \ 12x + 10y$$
$$\underline{\quad} + 25y$$

$$3a - 5b$$
$$(-)\ \ 5a - 7b$$
$$-2a - \underline{\quad}$$

Answer:

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

$$13x + \underline{\quad}$$
$$(+)\ \ 12x + 10y$$
$$\underline{\quad} + 25y$$

$$3a - 5b$$
$$(-)\ \ 5a - 7b$$
$$-2a - \underline{\quad}$$

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

Question: 55 ....

Shade the like terms.
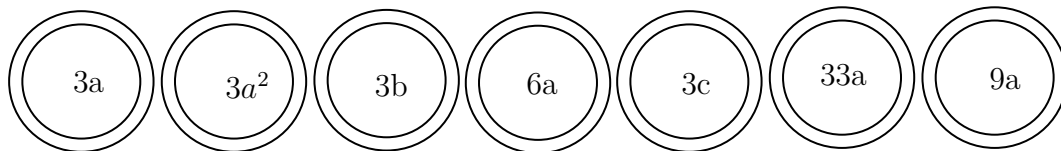
Answer:

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

Question: 56 ....

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

Answer:

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

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

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 **Terms of an expression**

Question: 58 . . . .

Separate the variables and constants for all the terms given in the box

$$18 \qquad 16r \qquad 54c^4 \qquad -4mn \qquad 4$$
$$0 \qquad\qquad z^2$$
$$4x \qquad 12 \qquad x \qquad ab$$
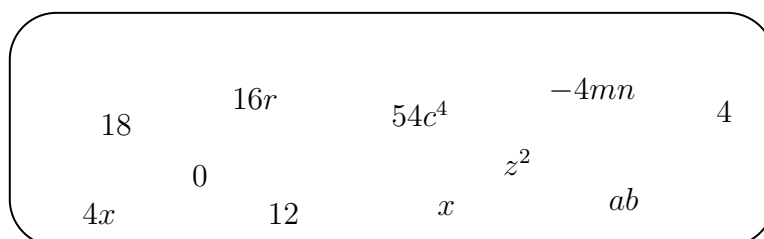
Answer:

In algebraic expression, variables are represented by _____ and Constant is a _____.

Terms	Constants	Variables

Question: 59 . . . .

Mark the expression that contains two terms.

$3x + 5 \quad 12a \quad 4xy \quad 12a + b + 1 \quad 7m + 0$

Answer:

The terms in the expression $3x + 5$ is/are _____.
The terms in the expression $12a$ is/are _____.
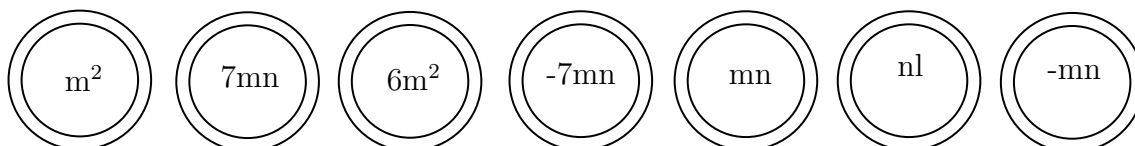The terms in the expression $4xy$ is/are _____.
The terms in the expression $12a + b + 1$ is/are _____.
The terms in the expression $7m + 0$ is/are _____.

Question: 60 . . . .

Shade the outline of circle that contains the term of the given expression.

$$6m^2 - 7mn + nl$$

Answer:
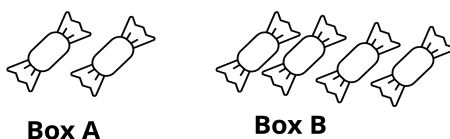
In algebraic expression, _____ (variables/ terms) are connected together with operations of addition.

Here, _____, _____, _____ are the terms of the given expression.

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

Question: 61 . . . .

Box A   **Box B**

Box B contains _____ times the number of chocolates in Box A

Answer:

Box A contains _____ chocolates.
Box B contains _____ chocolates.
No. of chocolates in Box B = _____ × (No. of chocolates in Box A)

Question: 62 . . . .

Write the equation for the following statement.
Subtracting four times of m from 4 is n

Answer:

$$\text{Four times of m} = \underline{\hspace{1.5cm}}$$
$$\text{Subtracting four times of } m \text{ from 4} = \underline{\hspace{1.5cm}}$$

The equation is $\underline{\hspace{1.5cm}}$

Question: 63 . . . .

Compare the given two statements $(<, >, =)$
Sum of $2a$ and 9 $\boxed{}$ Add 9 to the product of a and 2

Answer:

$$\text{Sum of } 2a \text{ and } 9 \ = \underline{\hspace{1.5cm}}$$
$$\text{Product of } a \text{ and } 2 = \underline{\hspace{1.5cm}}$$
$$\text{Add 9 to the product of } a \text{ and } 2 = \underline{\hspace{1.5cm}}$$

Therefore, sum of $2a$ and 9 $\boxed{}$ Add 9 to the product of a and 2