LaPIS Diagnostic Test Workbook - Mathematics

Name	:	**Haripriya S**
Class	:	**7**
Section	:	**C**
School	:	**AKV Public School**
Login ID	:	**AKV190**

Haripriya S's Performance Report
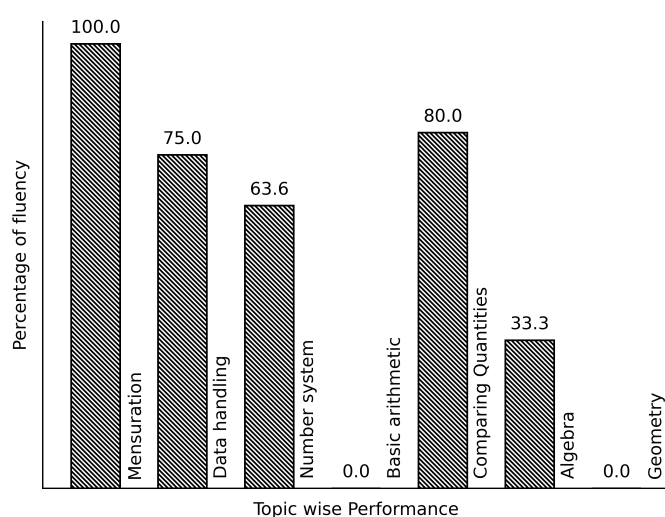
Score: 18/40   **Percentage: 45.0%**

Haripriya S's Study Planner

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

Teacher's Feedback to Student

_____
Class Teacher Signature

_____
Principal Signature

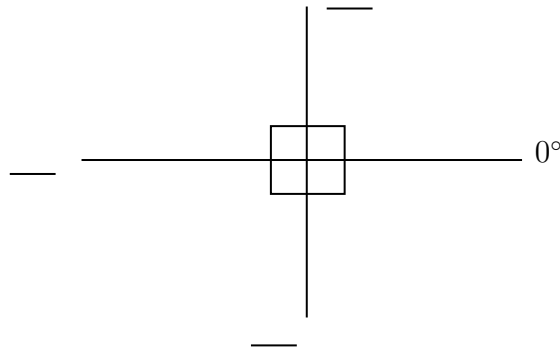# Basic arithmetic

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

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

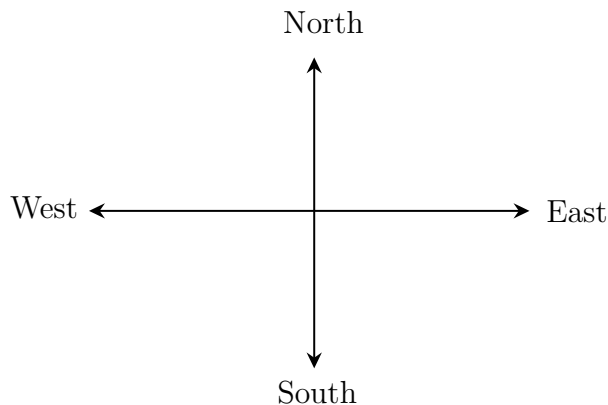*Question: 1* ....

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.

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

Question: 4 ....

Fill the hexagon with factors and multiples of 10.

Factors of 10   Multiples of 10
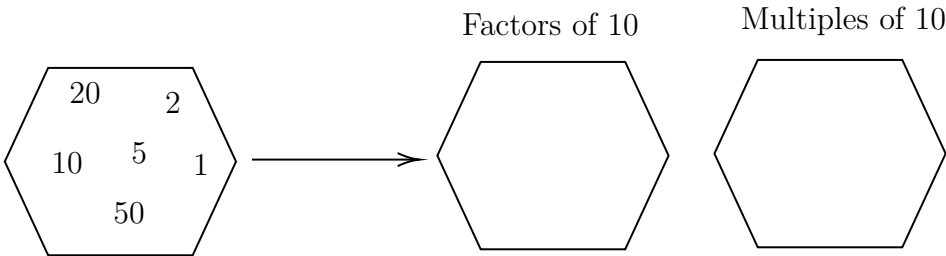
Answer:

A _____ (factor/multiple) of a number is an exact divisor of that number.

The factors of 10 are

10 x 1 = ___	___ x ___ = 10
2 x ___ = 10	___ x ___ = 10

Let's find the multiple of 10

10 x 1 = ___	10 x 4 = ___
10 x 2 = ___	10 x 5 = ___
10 x 3 = ___	10 x 6 = ___

Therefore, factors of 10 are _____ and multiples of 10 are _____.

Question: 5   ....

Find the LCM of 50, 100.

Answer:

Complete the division using least common multiple.

$$
\begin{array}{c|cc}
 & 50 & , 100 \\
\hline
 & & \\
\hline
 & & \\
\hline
 & & \\
\hline
 & & \\
\hline
\end{array}
$$

The LCM of 50, 100 is 2 x 2 x ___ x ___.

Question: 6   ....

Every number is the multiple of _____

Answer:

Let's find the first ten multiple of random numbers,

Multiple of 1 = _____
Multiple of 2 = _____
Multiple of 13 = _____
Multiple of 20 = _____

Here, _____ is the common factor of every number.

Data handling

Hi, here in this video you will learn **Mean, Median, Mode**
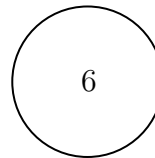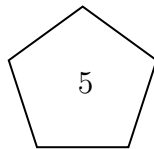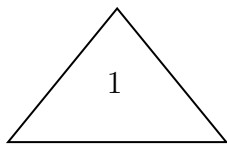
Question: 7

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
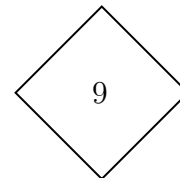
Answer:

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

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

Therefore, mean = _____

Arrange the data in ascending order : _____

Here, median = _____ , mode = _____.

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

Geometry

Topics to be Improved	
Sum of lengths of two sides of a triangle	Sum of two sides of a triangle
Lines of symmetry for regular polygons	Identification of lines of symmetry
Angle sum property of triangle	Angle sum property of triangle
Right angle triangle and pythagoras property	Basics of Pythagoras property
Faces vertex and edges	Idenfication of faces,edges and vertices
Related angles	Complementary angles, Basic of angles
Criteria for congruence of triangle	Idenfication of criteria of congruence of triangles
Transversal angle made by transversal	Basics of Transversal angle
Types of triangle	Basics of types of triangle (sides)

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

Question: 10 ....

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

A

70m

30m

B

60m

C
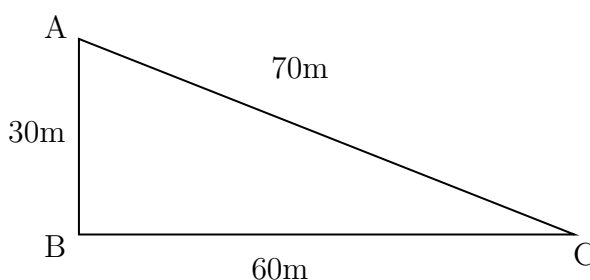
Answer:

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: 11 ....

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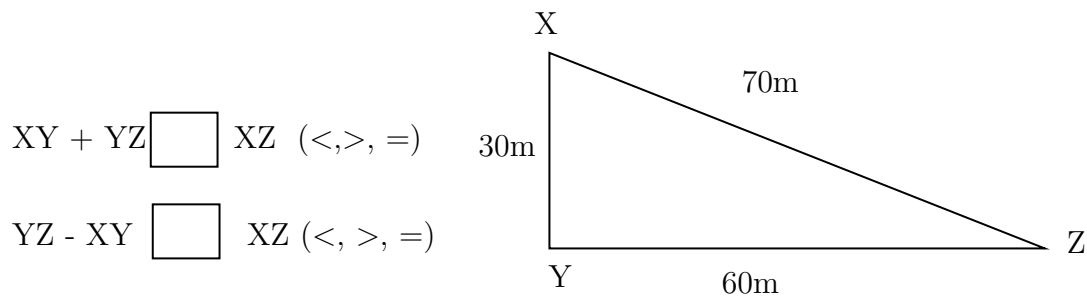
Answer:

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 (<, >, =)

Question: 12 ....

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 **Symmerty**

Question: 13 ....

Line of symmetry is divides any shape into _____ (one / two) _____ (identical / non identical) halves.

Answer:

Lines of symmetry is a line that divides any shape into _____ (equal / unequal) halves.
Symmetrical image have _____ (identical / non identical) parts.
Therefore, line of symmetry is dividing the shape into _____ halves.
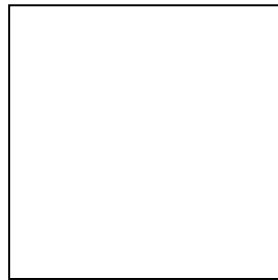
Question: 14   ....

How many lines of symmetry does square have?

Answer:

Square have _____ sides.
All sides of square are _____ and all angles are _____.

Mark the lines of symmetry.

Therefore, square has _____ lines of symmetry.

Question: 15   ....

Classify the following based on the symmetry.
Letter S, scalene triangle, Letter K, Rhombus, Number 8, and circle .

Answer:

Lines of symmetry is a line that divides the shape into _____ (equal / unequal) halves.
The letter S is _____ (symmetrical / asymmetrical) and have _____ lines of symmetry.
Scalene triangle is _____(symmetrical / asymmetrical) and have _____lines of symmetry.
The letter K is _____ (symmetrical / asymmetrical) and have _____ lines of symmetry.
Rhombus is _____(symmetrical / asymmetrical) and have _____ lines of symmetry.
Cat is _____ (symmetrical / asymmetrical) and have _____ lines of symmetry.
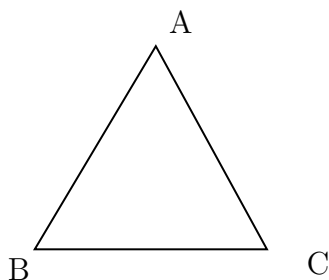Stars is _____ (symmetrical / asymmetrical) and have _____ lines of symmetry.

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

Question: 16   ....

Sum of the angles of triangle is _____.

Answer:

$$\angle A \; + \; \angle B \; + \; \angle C \; = \underline{\hspace{2cm}}$$
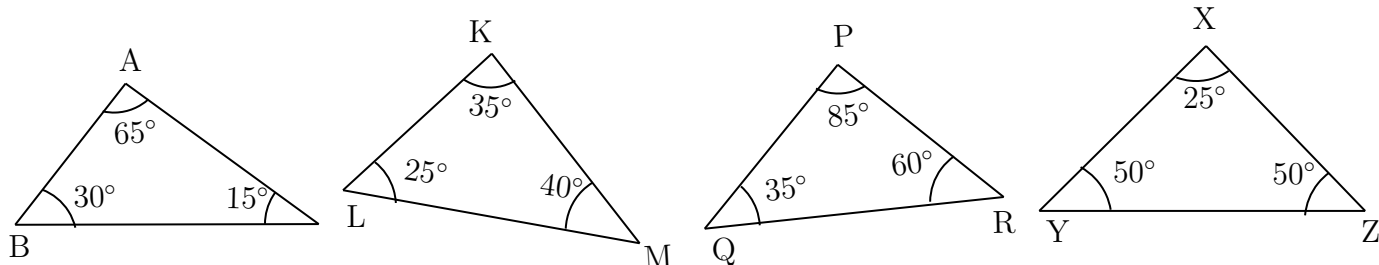
Angle sum formula $= (n - 2) \times 180°, n =$ number of sides

Triangle has _____ sides.

Sum of the angles of triangle $= (\underline{\hspace{1.5cm}} - 2) \times 180° = \underline{\hspace{1.5cm}}$

Question: 17 ....

Which of the following triangle satisfy the angle sum property.

Answer:

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

In $\triangle ABC$, Sum of the angles $= \angle A + \angle B + \angle C = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

In $\triangle PQR$, Sum of the angles $= \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

In $\triangle KLM$, Sum of the angles $= \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

In $\triangle XYZ$, Sum of the angles $= \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Therefore, the triangles that satisfy the angle sum property are $= \underline{\hspace{2cm}}$

Question: 18 ....

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

Answer:

Ratio of angles in the triangle is _____

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

We know sum of the angles of a triangle is ___

Therefore, $8x +$ ___ $+$ ___ $= 180°$. The value of $x =$ _____

The angles of the triangle are _____

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

Question: 19 ....

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

Answer:

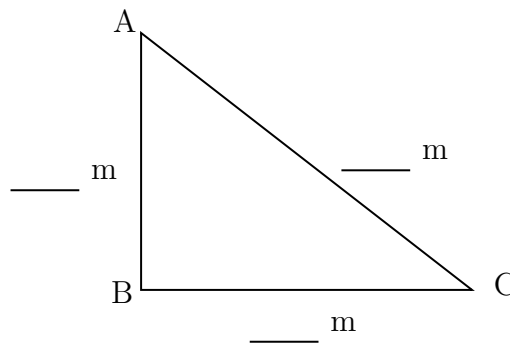Pythagoras theorem is only applicable for _____ triangle.

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

Pythagoras theorem states that _____.

Question: 20 . . . .

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

Answer:

A

_____ m   _____ m

B   C

_____ m

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

Given: Base = _____, Altitude = _____,

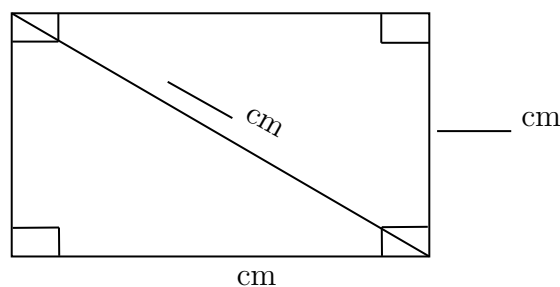Base and altitude are _____ (hypotenuse/ legs) of the triangle.

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

Therefore, hypotenuse of the triangle is _____.

Question: 21 . . . .

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 = _____

$$\text{By Pythagoras theorem, } (\underline{\hspace{1cm}})^2 = (\underline{\hspace{1cm}})^2 + (\underline{\hspace{1cm}})^2$$
$$\underline{\hspace{1.5cm}} = \underline{\hspace{1.5cm}} + \underline{\hspace{1.5cm}}$$

Therefore, diagonal of the rectangle is _____

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

Question: 22 ....
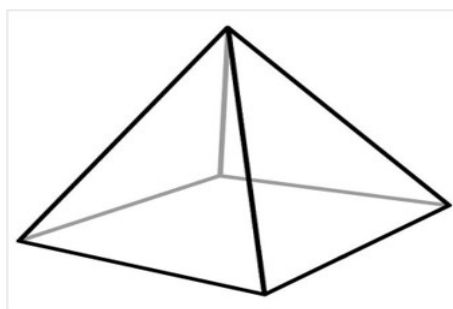
A point at which two or more lines segments meet is called _____(Vertex/ edges/ faces).

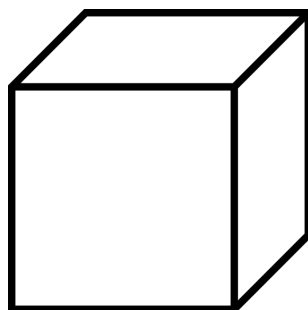### Answer:

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

A _____is a point where two or more line segments meet(Vertex/ edges/ faces).
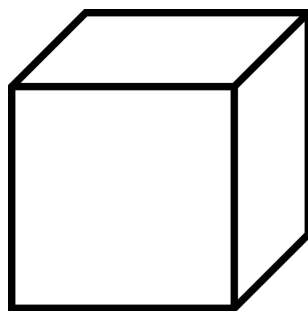
Mark the vertices in the diagram,

Question: 23 ....

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: 24 . . . .

How many vertices, edges and faces does dices have?

Answer:

The shape of dice is _____.
Dices have _____ vertices, _____ edges and _____ faces.

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

Question: 25 . . . .

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: 26

Shade the complementary angles.

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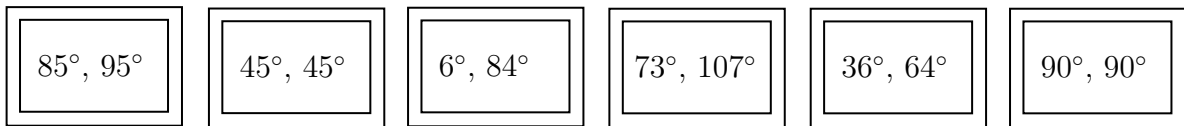
Answer:

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: 27

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 **Criteria of congruence**

Question: 28

Circle the groups that contain congruent images.
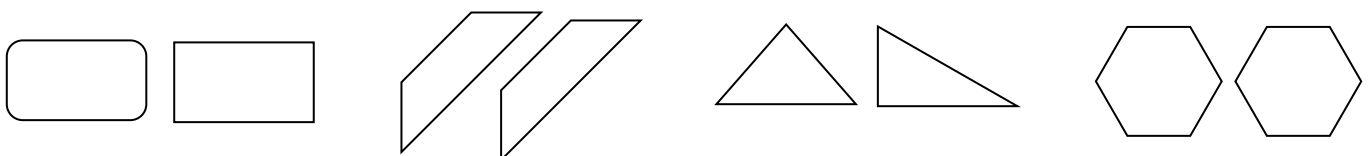
Answer:

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 .
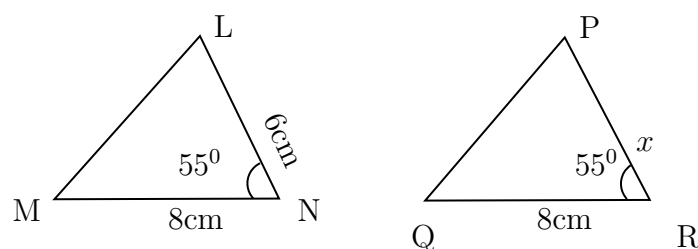
Answer:

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 ΔLNM is equal to the side _____ in $\triangle PRQ$

The common included angle in $\triangle$ LNM and $\triangle PRQ$ are _____
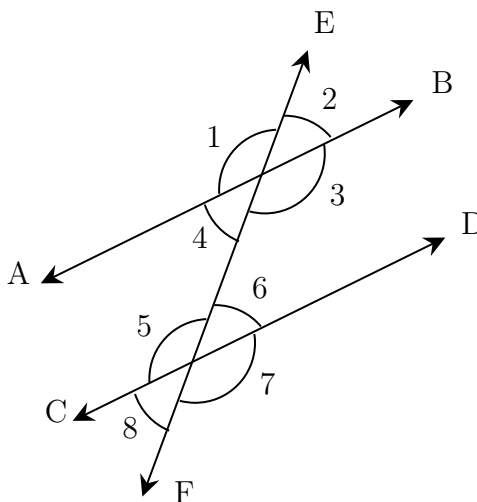
The side PR is equal to the side in _____ ΔLNM.

Therefore, length of side $PR =$ _____

Question: 31 . . . .

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: 32 . . . .

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).

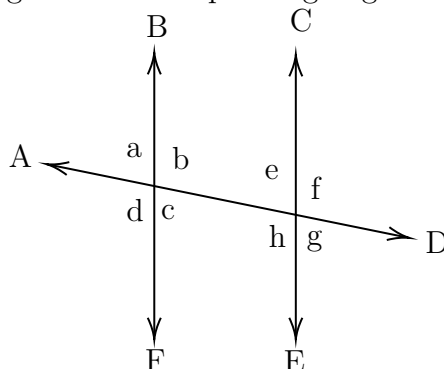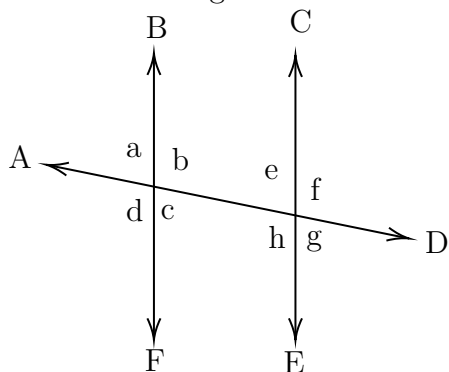In a given diagram, _____ is a transversal line. (BF/AD/CE)

Alternate angles	Corresponding angles
∠a and ∠g , ∠b and ∠h,	∠a and ∠e, ∠b and ∠f,

Question: 33 ....

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 **Types of triangle**

Question: 34 ....

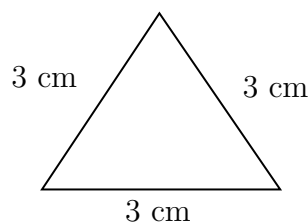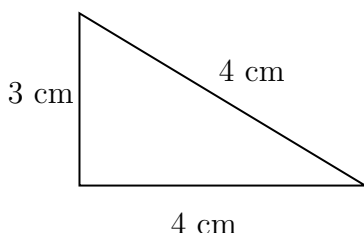Polygon with three sides is called as _____.

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: 35

Identify the types of triangles.

4 cm, 3 cm, 5 cm triangle; 3 cm, 4 cm, 4 cm triangle; 3 cm, 3 cm, 3 cm triangle.
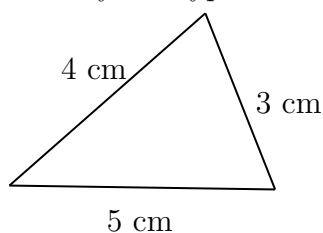
Answer:

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: 36

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 **Related Angles**

Question: 37

(i) When two rays of an angle are perpendicular, then the angle formed between them is a _____ angle .

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

Answer:

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

(i) The angle formed between two perpendicular rays is ___° and it is called _____ angle.

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

Question: 38

....

Find the angle of ∠DBE
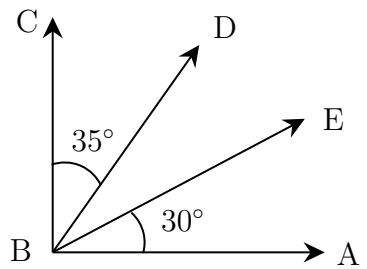
Answer:

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

$$\angle ABC = \angle ABE + \text{_____} + \text{_____}$$
$$= 30° + \text{_____} + \text{_____}$$
$$= \text{_____}$$
$$\text{Therefore, } \angle DBE = \text{_____}$$

Question: 39

....

Find the complementary angles in the given diagram.
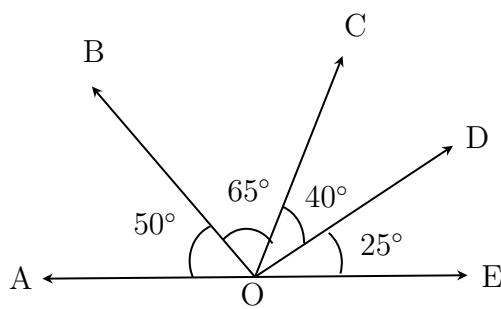
Answer:

Two angles are said be complementary if sum of their angles is equal to _____.
∠AOB= _____, and its complement angle is _____.
∠BOC = _____, and its complement angle is _____.
∠COD = _____, and its complement angle is _____.
∠DOE = _____, and its complement angle is _____.
Therefore, in the given figure the complementary angles are ∠AOB, _____ and ∠BOC, _____

Number system

Topics to be Improved	
Integers	Basics of integers
Law of Exponents	Law of Exponents
Positive and negative rational numbers	Identification of positive rational numbers
Decimals	Multiplication and division of decimals

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

Question: 40 ....

Highlight the ring that contains whole numbers.
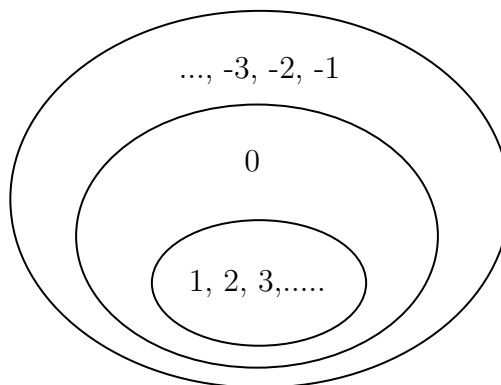
Answer:

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: 41 ....

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: 42 ....

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 **Law of exponents**

Question: 43 ....

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

Answer:

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

$$\text{In } (x)^0 \text{ base} = \text{_____}$$
$$\text{Power} = \text{_____}$$

 Any number or variable with power zero is equal to _____.
Therefore, $(x)^0$ equal to _____.

Question: 44 ....

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

Answer:

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

Question: 45 ....

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

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

Answer:

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

$$\left(a^0 \times b^1\right) + \left(m^1 \times n^0\right) + \left(x^0 \times y^1\right) = (\underline{\hspace{1cm}}) + (\underline{\hspace{0.5cm}}\text{Ö}\underline{\hspace{0.5cm}}) + (\underline{\hspace{1cm}})$$
$$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$
$$= \underline{\hspace{1cm}}$$

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

Question: 46 . . . .

Segregate positive and negative rational number.
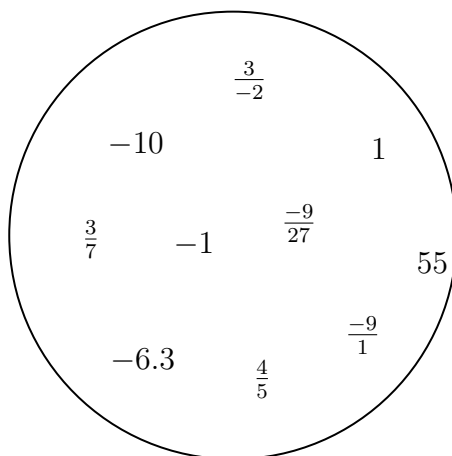
Answer:

- 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: 47 . . . .

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

Answer:

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

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

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

Question: 48 ....

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 × Negative rational number = _____ × _____ = _____ and this is _____ rational number

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

Question: 49 ....

Shade 0.4 part of the given shape.
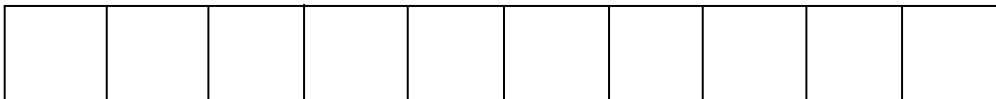
Answer:

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: 50 ....

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: 51 ....

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 _____ = _____

Comparing Quantities

Topics to be Improved	
Percentage	Basic of percentage

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 _____

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

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

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

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 _____ .

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

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

Algebra

Topics to be Improved	
Monomials, binomials, trinomials and polynomials	Types of algebraic expression
Basics of simple equation	Solving of simple equation
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 **Types of expression**

Question: 55 ....

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: 56 ....

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: 57 ....

$5m^2 + m + 0$ 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: 58 ....

If ☺= 5, then 5 ☺ +5 = _____

Answer:

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

Question: 59 ....

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: 60 ....

Arrange the terms in the descending order when the value of x is 2.
$2x \qquad 5x \times 1 \qquad x + 3 \qquad 2x - 4 \qquad \frac{1}{2}x$

Answer:

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

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

$$x + 3 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \qquad\qquad \frac{1}{2}x = \frac{1}{2} \times \underline{\hspace{0.6cm}} = \underline{\hspace{1cm}}$$

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

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

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

Question: 61 ....

Shade the like terms.

$$\textcircled{3a} \quad \textcircled{3a^2} \quad \textcircled{3b} \quad \textcircled{6a} \quad \textcircled{3c} \quad \textcircled{33a} \quad \textcircled{9a}$$

Answer:

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

Question: 62 ....

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

Answer:

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

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

Question: 63 ....

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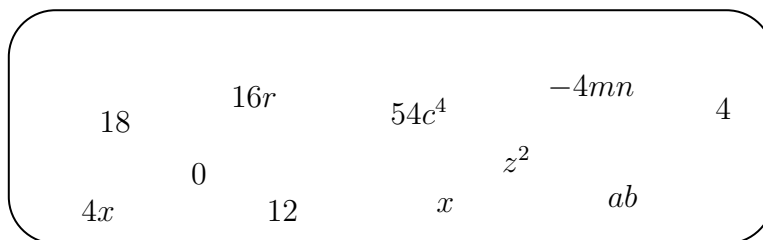   Ram's chocolate + Sam's chocolates = _____ + _____ = ___

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

_____ icecream - _____ icecream = _____ - _____ = _____

Hi, here in this video you will learn **Terms of an expression**

Question: 64 ....

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

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

Answer:

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

Terms	Constants	Variables

Question: 65 ....

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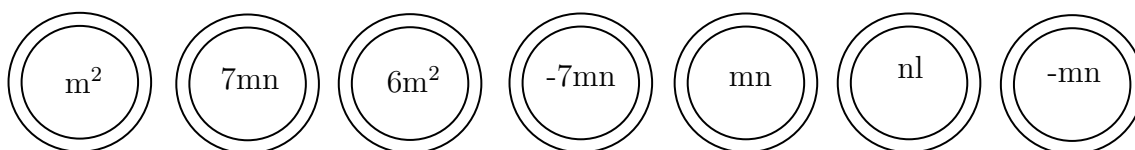The terms in the expression $4xy$ is/are _____.
The terms in the expression $12a + b + 1$ is/are _____.
The terms in the expression $7m + 0$ is/are _____.

Question: 66 ....

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

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

m^2 7mn   6m²   -7mn   mn   nl   -mn

Answer:

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

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