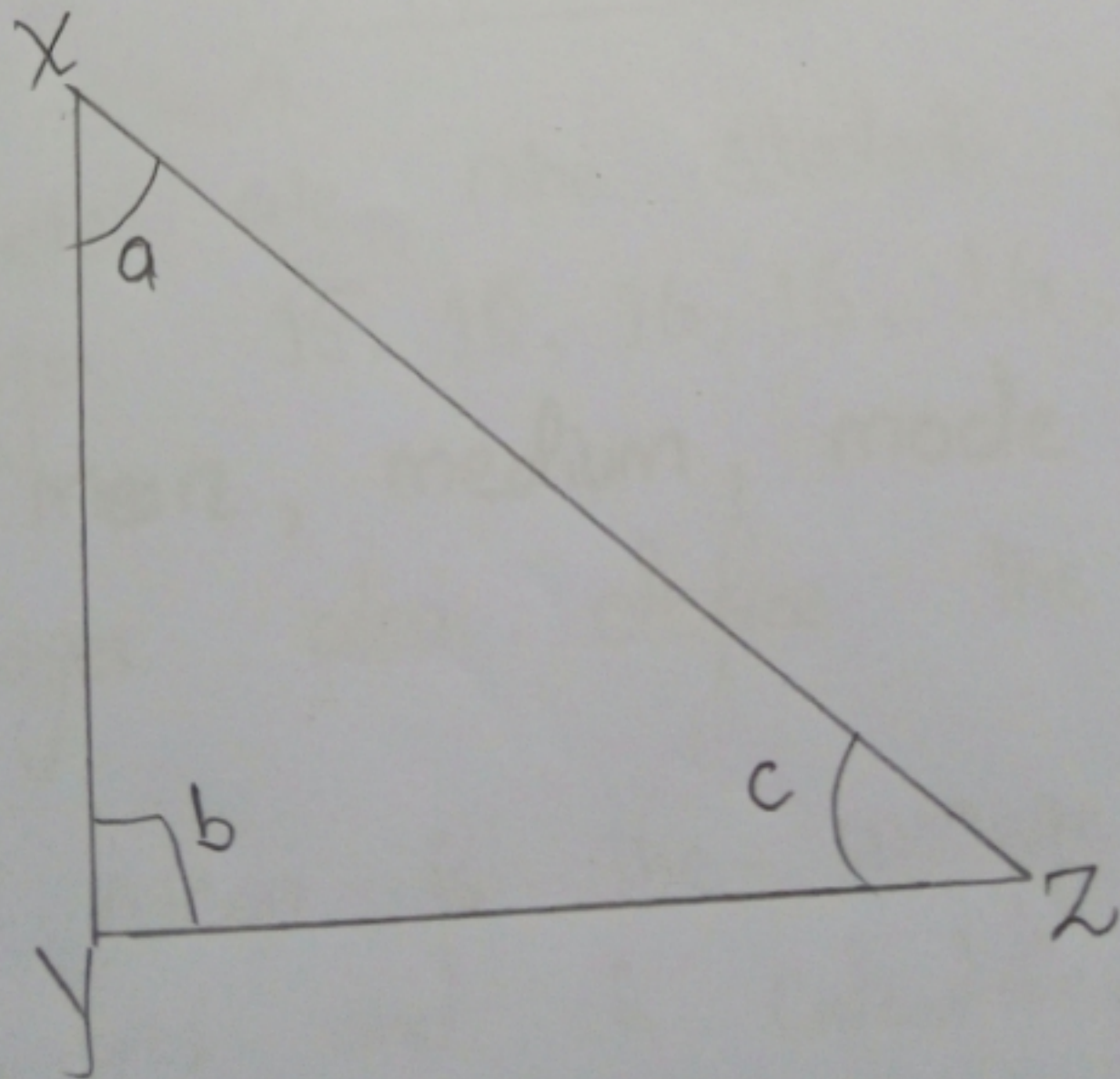


16/04/2024 General. Science and Ability

Q 1 (a) Define and draw the following;

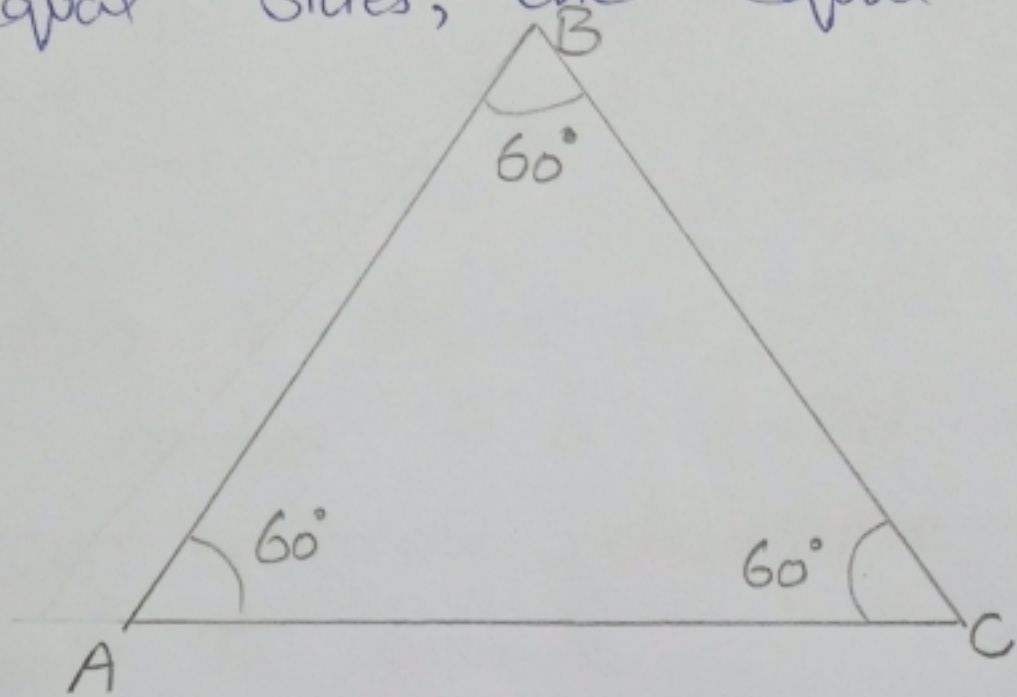
(i) Rightangle triangles:-

A right-angled triangle is a type of triangle that has one of its angles equal to 90° . The other two angles sum up of 90° . The sides that includes the right angle are perpendicular and base of the triangle. The third side is called the hypotenuse, which is the longest side of all three (3) sides.



Q 1. (a) Define and draw the following;
(ii) Equilateral triangles;

In geometry, an equilateral triangle is a triangle that has all its sides equal in length. Since the three sides are equal therefore the three angles, opposite to the equal sides, are equal in measures.



Q 1. (b) There are nine students in a group having ages 15, 15, 16, 16, 16, 17, 17, 18, 19. Calculate mean, median, mode and range of their ages also define the above mentioned terms.

Mean :- Mean is the average of the given numbers and is calculated by dividing the sum of the given numbers by the total numbers

$$\text{Mean} = \frac{\text{Sum of all the observations}}{\text{Total number of observations}}$$

e.g. : 15, 15, 16, 16, 16, 17, 17, 18, 19
Calculate the mean?

Mean :-
$$\frac{\text{Sum of all the observations}}{\text{Total number of observations}}$$

$$= \frac{15+15+16+16+16+17+17+18+19}{9}$$

Mean = $\frac{149}{9}$

Median

median is define as;
"the middle number in a sorted list of a numbers".
It can be more descriptive of that data set than the average

$$\text{Med} = \left(\frac{n+1}{2} \right)^{\text{th}}$$

$$= \left(\frac{9+1}{2} \right)^{\text{th}}$$

med = 16

Mode :- Mode is define as;
"The most repeated value that appears in your set of data".

e.g. = 15, 15, 16, 16, 16, 17, 17, 18, 19

$$\text{mode} = 16$$

Range :- Range is define as;
"The difference between the highest values and the lowest values in a given set of numbers".

$$R = \text{Max value} - \text{Minimum value}$$

e.g. = 15, 15, 16, 16, 16, 17, 17, 18, 19

Sol.:- Maximum value - Minimum value

$$\text{Range} = 19 - 15$$

$$\text{Range} = 4$$