

# Short Communication on Triangles

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A triangle is outlined as a polygonal shape that has 3 angles and 3 sides. The inside angles of a triangle add up to one hundred eighty degrees and also the exterior angles add up to 360 degrees. Relying upon the angle and its length, a triangle is classified within the following types-

1. Trilateral - All the 3 sides of constellation live} of various measure

2. Triangle - Any 2 sides of constellation are of equal length

3. Trigon – All the 3 sides of a triangle are equal and every angle measures sixty degrees

4. Acute angular Triangle – All the angles are smaller than ninety degrees

5. Right angle Triangle – Anyone of the 3 angles is adequate to ninety degrees

6. Triangle - one amongst the angles is larger than ninety degrees

### Similarity Criteria of Triangles

To find whether or not the given 2 triangles are similar or not, it's four criteria. They are:

• aspect-Side- Side (SSS) Similarity Criterion – once the corresponding sides of any 2 triangles are within the same quantitative relation, then their corresponding angles are equal and also the triangle are thought of as similar triangles.

• Angle Angle Angle (AAA) Similarity Criterion – once the corresponding angles of any 2 triangles are equal, then their corresponding aspect is within the same quantitative relation and also the triangles are thought of to be similar.

• Angle-Angle (AA) Similarity Criterion – once 2 angles of 1 triangle are severally adequate to the 2 angles of the opposite triangle, and then the 2 triangles are thought of as similar.

• Side-Angle-Side (SAS) Similarity Criterion – once one angle of a triangle is adequate to one angle of another triangle and also

the sides together with these angles are within the same quantitative relation (proportional), then the triangles are aforementioned to be similar.

#### Problems associated with Triangles:

1. a woman having a height of ninety cm is walking far from a lamp-post's base at a speed of one.2 m/s. Calculate the length of that girl's shadow when four seconds if the lamp is three.6 m higher than the bottom.

2. S and T are points on sides PR and QR of triangle PQR specified angle P = angle RTS. Now, prove that triangle RPQ and triangle RTS are similar.

3. E may be a purpose on the aspect AD made of a quadrilateral ABCD and BE intersects CD

at F. Show that triangles ABE and CFB are similar.

### **Properties of Triangle**

A triangle may be a polygonal shape that consists of 3 sides, 3 edges, 3 vertices and also the ad of internal angles of a triangle adequate to 180°. Relying upon the edges and angles of a triangle, we've got differing kinds of triangles, that we are going to discuss here. Triangle is a crucial construct that instructed in most of the categories like category seven, Class 8, Class 9, category ten and in school eleven. You'll learn the properties of triangles here together with its definitions, sorts and its significance in Math's.

In the starting, we tend to begin from understanding the form of triangles, its sorts and properties, theorems supported it like Pythagoras theorem, etc. In higher categories, we tend to trot out pure mathematics, wherever the trilateral is that the base of the construct. Allow us to learn here a number of the basics of constellation by knowing its properties.

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