

**CBSE Class 7 Maths Notes Chapter 7:** Get a free PDF of CBSE Class 7 Maths Notes Chapter 7 to find out more about this useful resource for Class 7 Mathematics. Using the most recent CBSE (NCERT) textbooks, our qualified maths professors have created these resources to help you comprehend and apply the concepts.

Whether you're looking to improve your knowledge of the material or are getting ready for an impending exam, our platform is committed to helping you get rid of any misunderstanding so you can approach your studies with confidence.

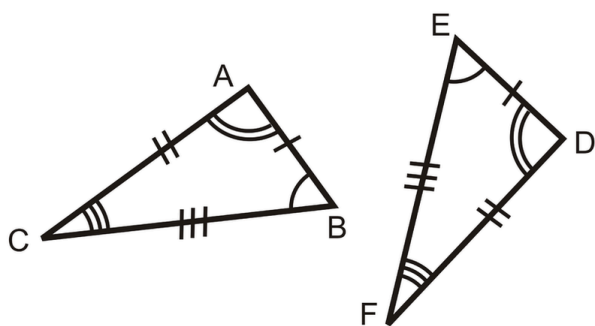
## CBSE Class 7 Maths Notes Chapter 7

Here we have provided CBSE Class 7 Maths Notes Chapter 7 for the students so that they can understand the concepts of this chapter better by using our notes.

### Congruence

If and only if the shape and size of two objects match, they are said to be congruent.

Congruence is the relationship between two congruent objects.



Congruence is denoted by symbol  $\cong$

### Congruence of Plane Figures

When two flat figures superpose, or when one figure is positioned on top of another, they coincide, two figures are said to be congruent.

If plane P1 and plane P2 are congruent, then  $P1 \cong P2$  is written or indicated.

### Congruence Among Line Segments

If the lengths of two lines are equal, they are said to be congruent.

On the other hand, two lines are of same length if they are congruent.

### Congruence of Angle

Two angles are said to be congruent if they have equal measure.

Conversely, if two angles are congruent, they are of equal measure.

## Congruence of Triangle

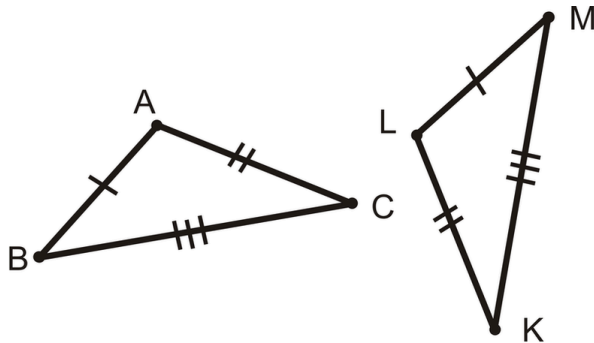
If two triangles have equal corresponding angles, corresponding sides, and corresponding vertices, they are said to be congruent.

## Criteria For Congruence of Triangle

The congruence of a triangle must meet four requirements, and these are

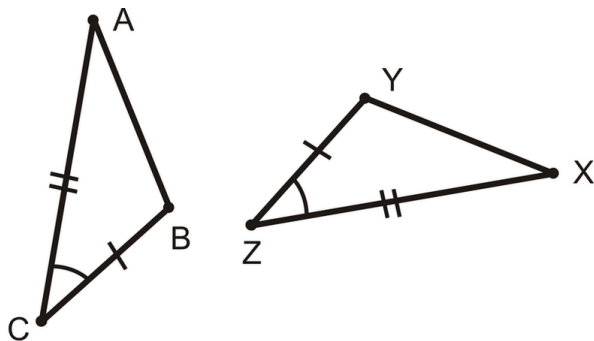
### SSS Criteria for Congruency

- If, under a given correspondence, the three sides of one triangle are equal to the three corresponding sides of another triangle, then the triangles are congruent.



### SAS Criteria for Congruency

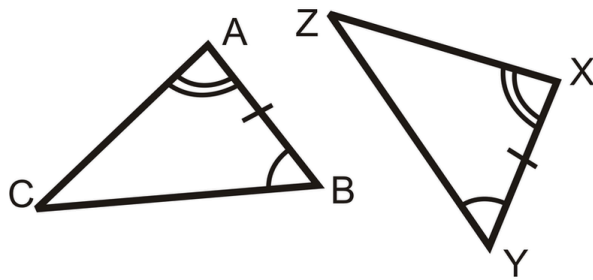
- If, under a correspondence, two sides and the angle included between them of a triangle are equal to two corresponding sides and the angle included between them of another triangle, then the triangles are congruent.



### ASA Criteria for Congruency

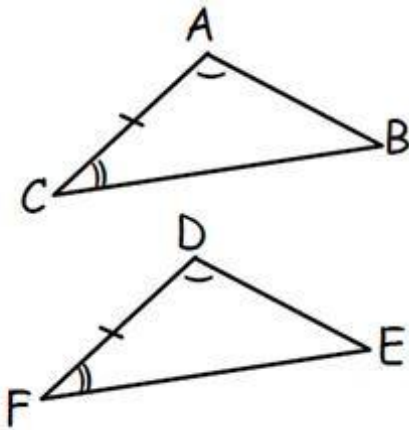
- If, under a correspondence, two angles and the included side of a triangle are equal to two corresponding angles and the included side of another triangle, then the

triangles are congruent.



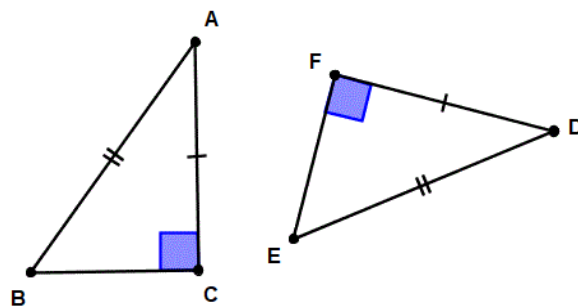
## AAS Criteria for Congruency

AAS Rule: Triangles are congruent if two pairs of corresponding angles and a pair of opposite sides are equal in both triangles.



## RHS Criteria for Congruency

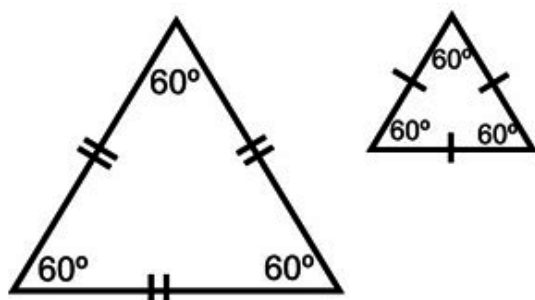
- If, under a correspondence, the hypotenuse and one side of a right-angled triangle are respectively equal to the hypotenuse and one side of another right-angled triangle, then the triangles are congruent.



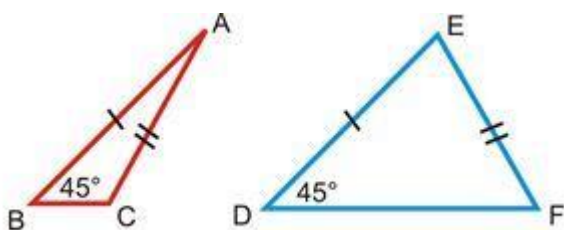
## Why are SSA and AAA congruency rules not valid?

- Two triangles with equal corresponding angles need not be congruent. In such a correspondence, one of them can be an enlarged copy of the other. Therefore AAA

congruency is not valid.



- If two triangles have two congruent sides and a congruent non-included angle, then triangles are not necessarily congruent. Therefore, SSA congruency is not valid.



## Benefits of CBSE Class 7 Maths Notes Chapter 7

Below we have mentioned some of the benefits of the Class 7 chapter 7 notes -

- CBSE Class 7 Maths Notes Chapter 7 provide concise, understandable descriptions of important ideas.
- Simplifies difficult subjects for easier comprehension.
- Effective study aid for final exam preparation.
- Improves the recall of important information.
- Offers essential points and advice to help with efficient exam preparation.
- Combines information to save time.
- Gives priority to significant subjects and inquiries.
- Provides useful illustrations for linkages to the actual world.
- Increases students' exam-taking confidence.