

Congruency of Triangles

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



Learning Objectives

We will learn to,



Learning Objectives

We will learn to,

- **Construct congruent triangles**



Learning Objectives

We will learn to,

- **Construct congruent triangles**
- **Prove their congruency**



System Requirement



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- **Ubuntu Linux OS v 14.04**



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- **GeoGebra v 5.0.438.0-d**



Pre-requisites



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- **GeoGebra interface**



Pre-requisites

- **GeoGebra interface**
- **For the prerequisite GeoGebra tutorials, please visit our website www.spoken-tutorial.org**



Congruency of Triangles



Congruency of Triangles

Two triangles are congruent if,



Congruency of Triangles

Two triangles are congruent if,

- **They are of the same size and shape**



Congruency of Triangles

Two triangles are congruent if,

- They are of the same size and shape
- All the corresponding sides and interior angles are congruent

$$\triangle ABC \cong \triangle DEF$$



SSS rule of Congruency



SSS rule of Congruency

**Two triangles are congruent if,
three sides of one triangle are equal to
the three corresponding sides of another
triangle**



Assignment



Assignment

- 1 Join the points D, G and G, E



Assignment

- 1 Join the points D, G and G, E
- 2 Compare the segment lengths in the Algebra view



ASA rule of Congruency



ASA rule of Congruency

Two triangles are congruent if, two angles and an included side of a triangle are equal to two corresponding angles and an included side of another triangle



SAS rule of Congruency



SAS rule of Congruency

Two triangles are congruent if, two sides and an included angle of a triangle are equal to corresponding two sides and an included angle of another triangle



Summary



Summary

We have learnt to,

- **Construct congruent triangles**
- **Prove their congruency**



Assignment



Assignment

Construct two triangles and prove,



Assignment

Construct two triangles and prove,

① Angle Angle Side rule of congruency



Assignment

Construct two triangles and prove,

- ① Angle Angle Side rule of congruency**
- ② Hypotenuse Leg rule of congruency**



About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Forum for specific questions

- Do you have questions in THIS Spoken Tutorial?
- Please visit <http://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- Someone from our team will answer them



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- More information on this Mission is available at

<http://spoken-tutorial.org /NMEICT-Intro>

