

Congruency Triangles

1. Introduction

- For 2 triangles (or 2 figures) to be congruent, they must be identical
- For triangles, this means all 3 pairs of corresponding sides and angle must be equal

2. Rules

No.	Specific Conditions	Given Conditions (in sequence)	Test for Congruency
1	$AB = 6cm, AC = 5cm, BC = 4cm$	SSS	
2	$\angle A = 50^\circ, \angle B = 60^\circ, \angle C = 70^\circ$	AAA	(Similar Triangle test)
3	$\angle A = 50^\circ, AB = 6cm, \angle B = 40^\circ$	ASA	
4	$AB = 6cm, \angle A = 50^\circ, AC = 5cm$	SAS	
5	$AC = 5cm, BC = 4cm, \angle A = 50^\circ$	SSA	
6	$\angle A = 50^\circ, \angle B = 60^\circ, AC = 5cm$	AAS	
7	$\angle A = 90^\circ, BC = 5cm, AC = 3cm$	RHS	

3. Similar Triangle Rules

1		AAA	(Similar Triangle test)
2		SAS	(Similar Triangle test)

$$\frac{AB}{AD} = \frac{AC}{AE}$$

