

What is the minimum amount of information that is needed to make two triangles similar?

1. If one angle of one triangle is equal to one angle of another triangle, will the two triangles be similar? Make drawings to support your answer.

2. If one side of one triangle is proportional to one side of another triangle, will the two triangles be similar? Make drawings to support your answer.

3. If two sides of one triangle are proportional to two sides of another triangle, will the two triangles be similar? Make drawings to support your answer.

4. If two angles of one triangle are equal to two angles of another triangle, will the two triangles be similar? Make drawings to support your answer.

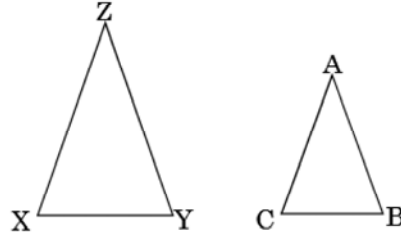
5. If _____
then the triangles are similar. This is called the ANGLE-ANGLE POSTULATE (AA)

6. If triangles are similar, then the ratios of corresponding sides are _____ and Corresponding angles are _____. This is a definition of SIMILAR TRIANGLES.

Complete the proofs on the next two pages.

1. Given: $\angle X \cong \angle C, \angle Z \cong \angle A$

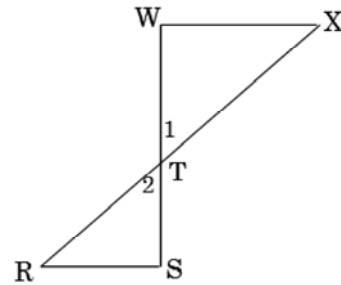
Prove: $\frac{XY}{CB} = \frac{YZ}{BA}$



Statements	Reasons
1.	1.
2.	2.
3.	3. Definition of similar triangles

2. Given: $\angle S$ and $\angle W$ are right angles

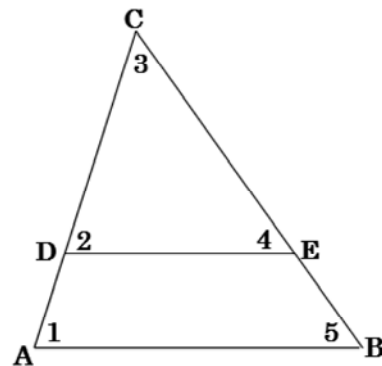
Prove: $\Delta RST \sim \Delta XWT$



Statements	Reasons
1.	1.
2.	2. All right angles are congruent.
3.	3.
4.	4.

3. Given: $\overline{DE} \parallel \overline{AB}$

Prove: $\Delta CDE \sim \Delta CAB$



Statements	Reasons
1.	1.