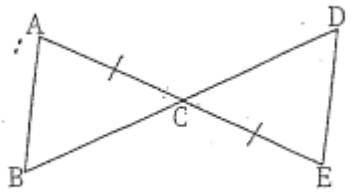
Geometry Ch. 4 Triangle Congruence Proofs Practice WS

Proofs Reasons Bank (This will NOT be provided for you on the test) : Given, Vertical Angles are Congruent, Reflexive Property, Def of Angle Bisector, Def of Midpoint, Alt. Interior Angles ≅ , Triangles congruent (SSS, SAS, HL, ASA, AAS) , CPCTC

1. (4 steps)

Given $\overline{AB} \parallel \overline{ED}$, $\overline{AC} \cong \overline{EC}$

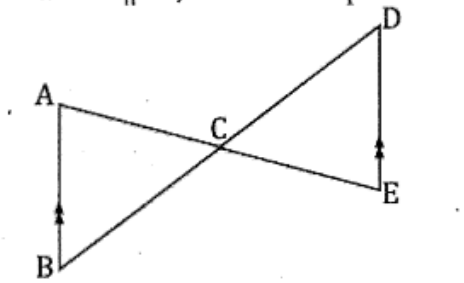


Prove: $\triangle ABC \cong \triangle EDG$

Statement	Reason

2. (6 steps)

Given: $\overline{AB} \parallel \overline{DE}$, C is the midpoint of $\overline{AE}$



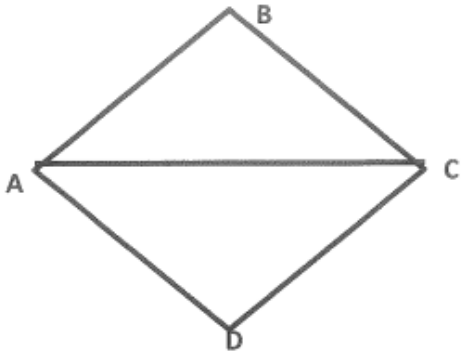
Prove: $\overline{BC} \cong \overline{DC}$

Statement	Reason

3. (4 steps)

Given: $\overline{BC} \cong \overline{CD}$ and $\overline{AC}$ bisects $\angle BCD$

Prove: $\Delta ABC \cong \Delta ADC$



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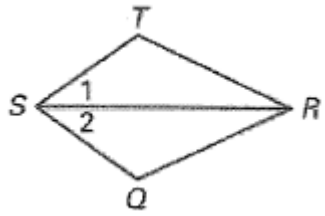
4. (4 steps)



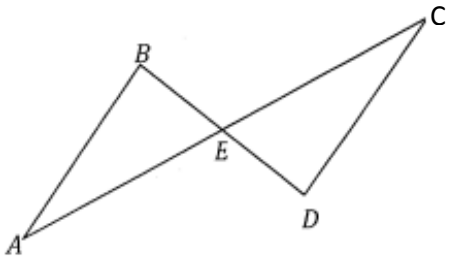
Given: $\overrightarrow{SR}$ bisects $\angle TSQ$,

$\angle T \cong \angle Q$

Prove: $\triangle RTS \cong \triangle RQS$

Statement	Reason

5. (4 steps)



Given: $\overline{AB} \cong \overline{CD}, \angle A \cong \angle C$

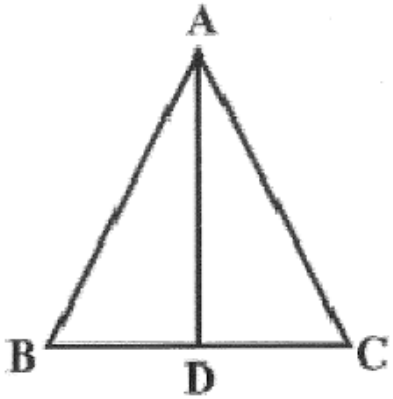
Prove: $\overline{BE} \cong \overline{DE}$

Statement	Reason

6. (5 steps)

Given: $\overline{AB} \cong \overline{AC}$ and $\overline{AD}$ bisects $\overline{BC}$

Prove: $\angle BAD \cong \angle CAD$



Statement	Reason