Side Side Side Worksheet and Activity

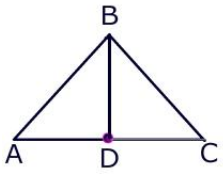
More worksheets and activities available at

www.mathwarehouse.com/classroom/worksheets-and-activities.php

http://www.mathwarehouse.com/geometry/congruent_triangles/side-side-side-postulate.php

Warm Up

1) What property states that BD $\cong$ BD?



3) Write down at least three criteria that you think must always be true for two triangles that are congruent?

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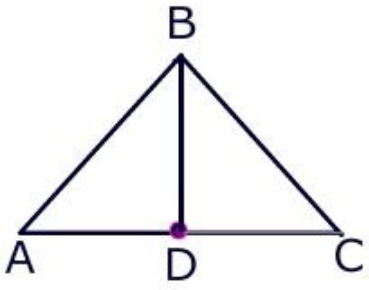
Model Problems **Side Side Side Proofs**



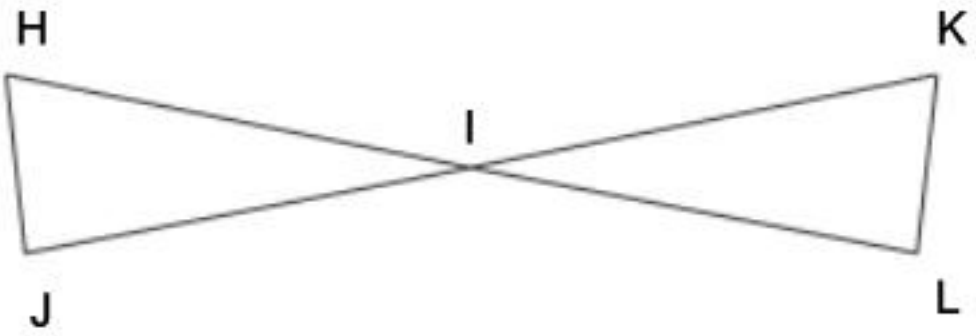
Proof A

Given: $\overline{AB} \cong \overline{BC}$, $\overline{BD}$ is a median of side $\overline{AC}$

Prove: $\Delta ABD \cong \Delta CBD$

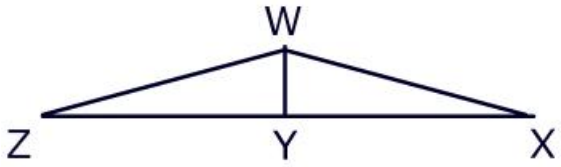
Statement	**Reasons**

Given: HL bisects JK, HJ ≅ KL
What other information do you need to be able to prove that these two triangles are congruent?



Proof B

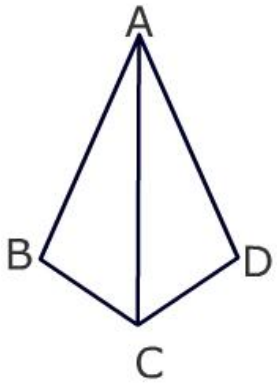
Given: $\overline{WZ} \cong \overline{WX}$, $\overline{WY}$ bisects $\overline{ZX}$
Prove: $\Delta WYZ \cong \Delta WYX$



Statement	Reasons

Proof C

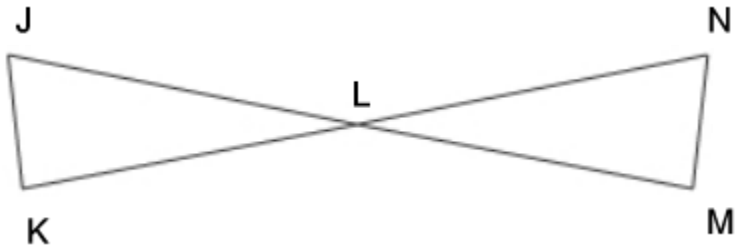
Given: $\overline{BA} \cong \overline{AD}, \overline{BC} \cong \overline{CD}$
Prove: $\Delta ABC \cong \Delta ADC$



Statement	**Reason**

Proof D

Given: JM bisects KN, KN bisects JM, JK $\cong$ NM
Prove: $\Delta JLK \cong \Delta MLN$



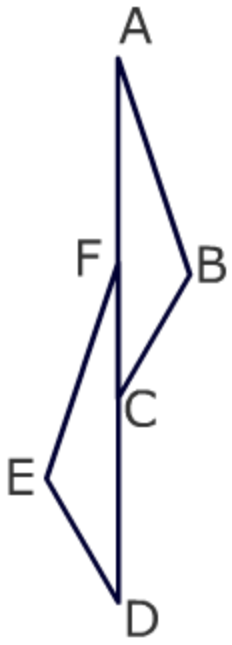
Statement	**Reason**

Think Pair Share

Is it possible to prove that the two triangles on the right are congruent using the SSS postulate?

Given: AF ≅ CD, AB ≅ EF, BC ≅ ED

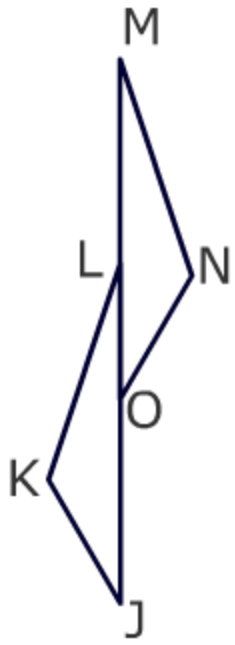
Explain your reasoning.



Proof E

Given MN ≅ KL, ML ≅ OJ, KJ ≅ ON.

Prove the triangles are congruent



Proof F

Given XZ is a median WX ≅ XY. Prove the triangles are congruent