

Proving Triangles Congruent: SSS and SAS

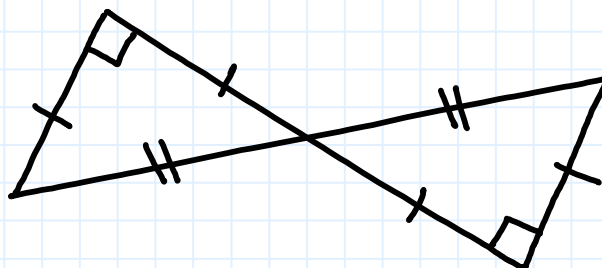
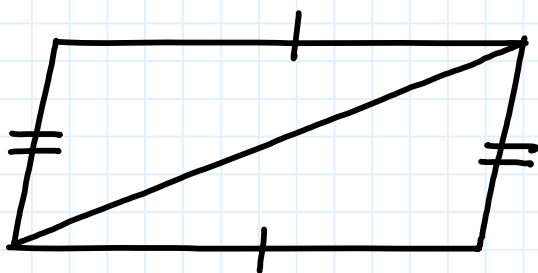
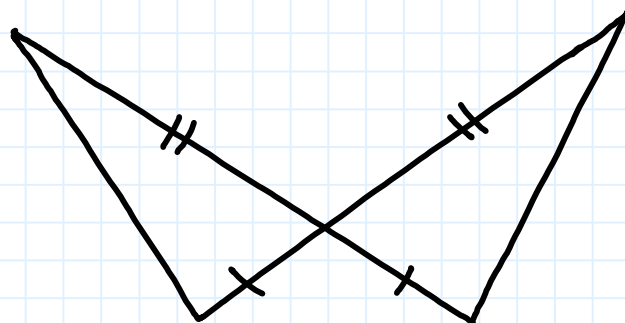
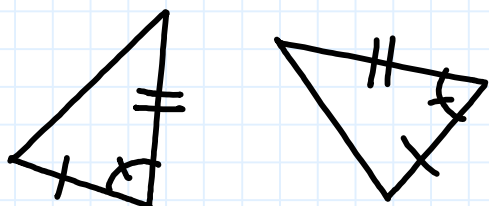


Overview of problems



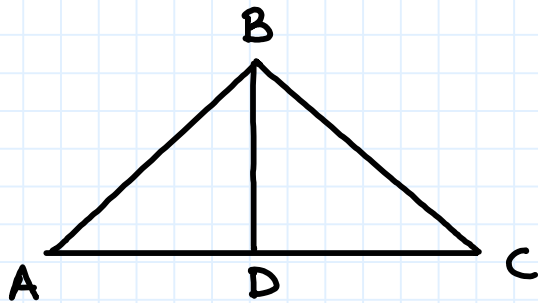
Example Set: A

Determine if the two triangles can be proved congruent





Example Set: B



Given: D is the midpoint of \overline{AC} ,
 $\overline{BD} \perp \overline{AC}$

Prove: $\triangle ABD \cong \triangle DCB$

Proving Triangles Congruent: SSS and SAS

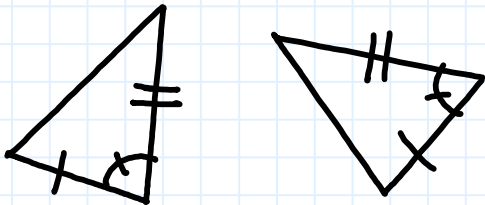


Overview of problems- KEY

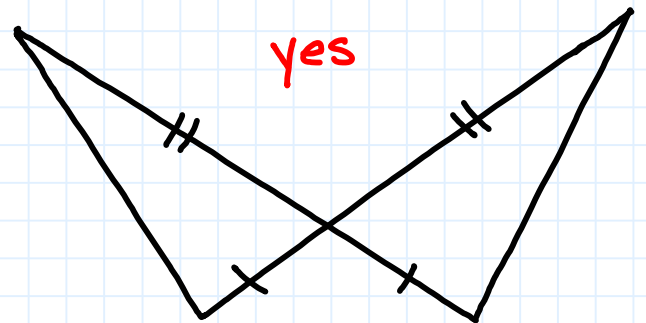


Example Set: A

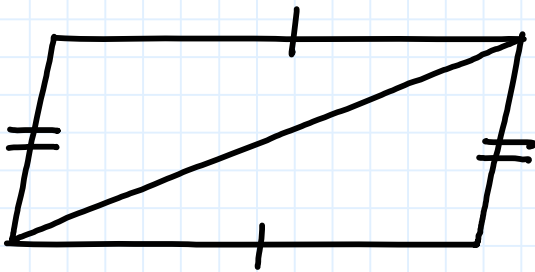
Determine if the two triangles can be proved congruent



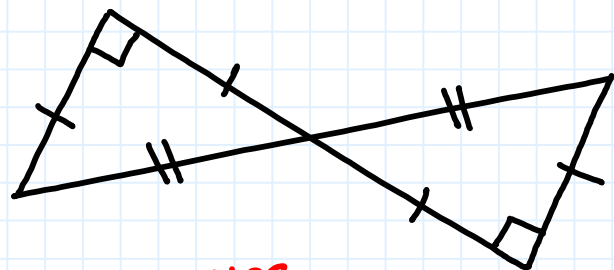
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yes



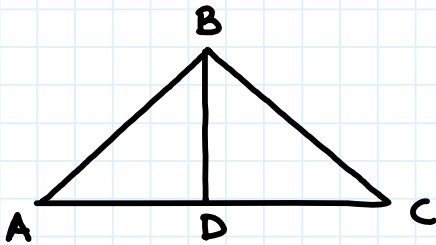
yes



yes



Example Set: B



Given: D is the midpoint of \overline{AC} ,
 $\overline{BD} \perp \overline{AC}$

Prove: $\triangle ABD \cong \triangle DCB$

Statement	Reason
D is the midpoint between AC	Given
$AD \cong DC$	Def. of midpoint
$\overline{BD} \perp \overline{AC}$	Given
$\angle ADB \cong \angle BDC$	\perp lines form \cong adj. \angle 's
$BD \cong BD$	Ref. Prop.
$\triangle ABD \cong \triangle DCB$	SAS Post.