

Proving Triangles Congruent: ASA and AAS

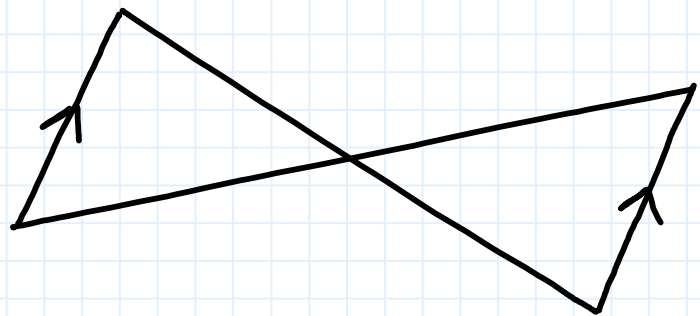
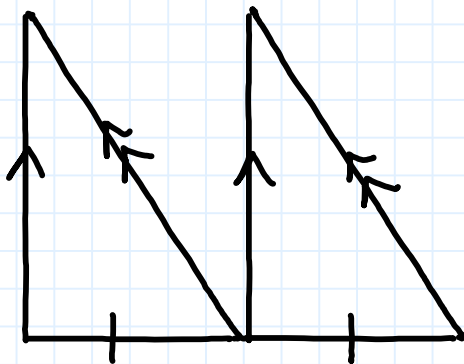
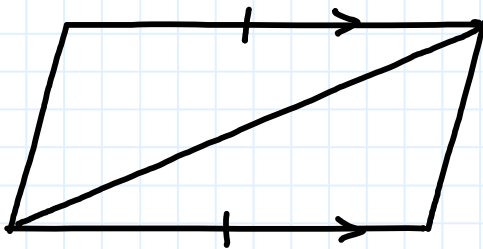


Overview of problems



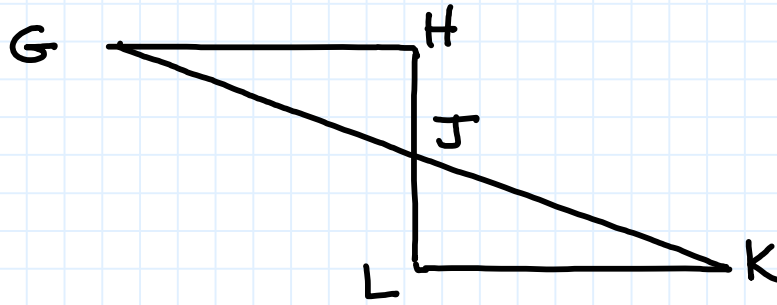
Example Set: A

Determine if the two triangles can be proved congruent





Example Set: B



Given: $\overline{GH} \perp \overline{HL}$, $\overline{LK} \perp \overline{HL}$,

J is the midpoint of \overline{HL}

Prove: $\triangle GHJ \cong \triangle KLJ$

Proving Triangles Congruent: ASA and AAS

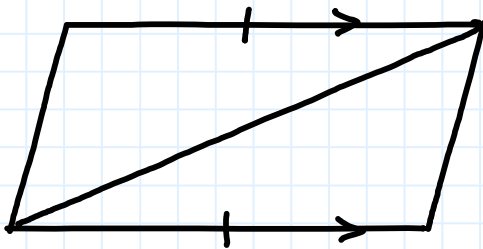


Overview of problems- KEY

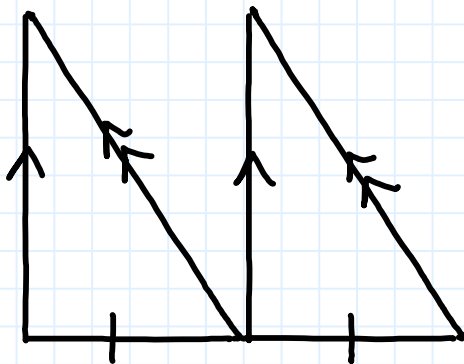


Example Set: A

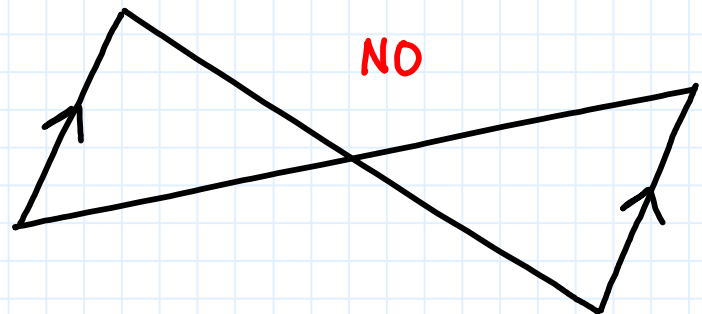
Determine if the two triangles can be proved congruent



yes



yes



NO

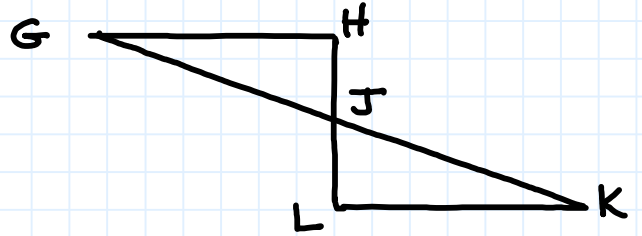


Example Set: B

Given: $\overline{GH} \perp \overline{HL}$, $\overline{LK} \perp \overline{HL}$,

J is the midpoint of \overline{HL}

Prove: $\triangle GHJ \cong \triangle KLJ$



Statement	reason
$\overline{GH} \perp \overline{HL}$, $\overline{LK} \perp \overline{HL}$,	Given
$\angle H = 90^\circ$, $\angle L = 90^\circ$	Def. of \perp lines
$\angle H \cong \angle L$	Def. of \cong \angle 's
J is the midpoint of \overline{HL}	Given
$HJ \cong JL$	Def. of midpoint
$\angle GJH \cong \angle LJK$	Vertical \angle 's are \cong
$\triangle GHJ \cong \triangle KLJ$	ASA Post.