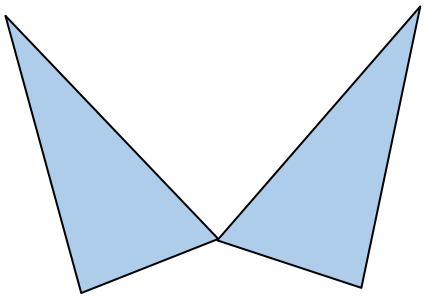
Proving Triangles Congruent: HL Theorem 15.4

Overview of Problems

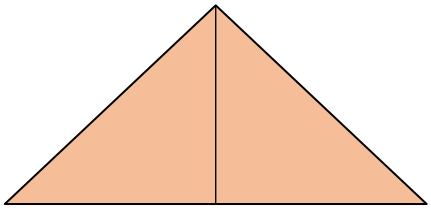
Example Set: A

Add more information to the figures so that one could prove the triangles are congruent using the HL Theorem:

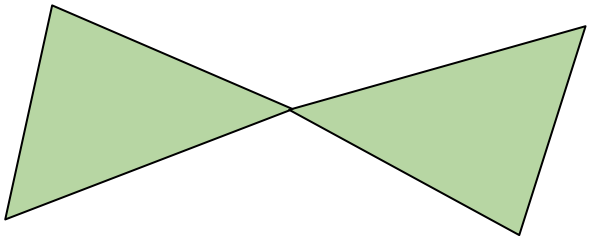
1.



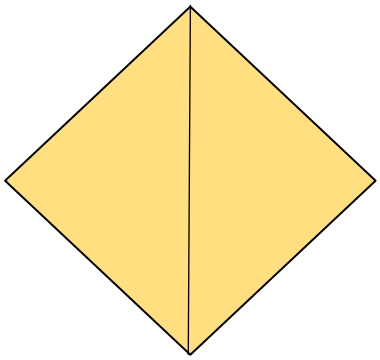
2.



3.



4.

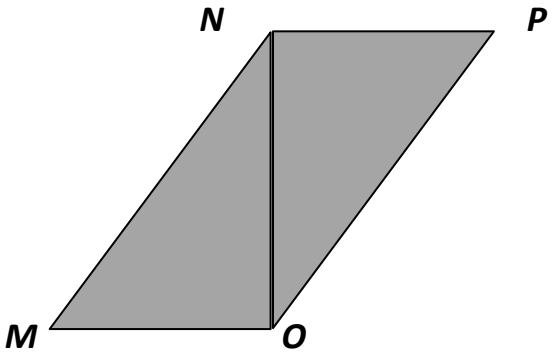


Proving Triangles Congruent: HL Theorem 15.4

Overview of Problems

Example Set: B

1.



Given: $NP \perp NO, MO \perp NO$

$MN \cong OP$

Prove: $\angle M \cong \angle P$

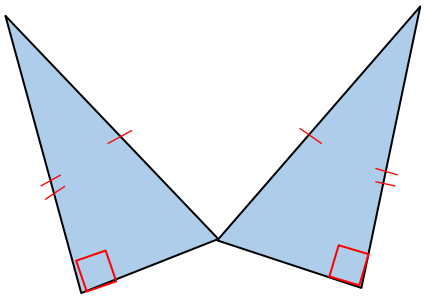
Proving Triangles Congruent: HL Theorem 15.4

Overview of Problems

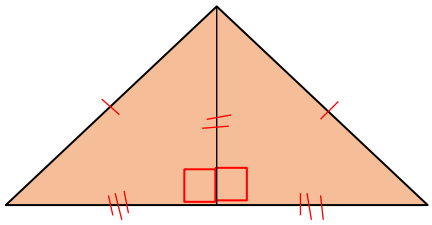
*Example Set: A -**ANSWER KEY***

Add more information to the figures so that one could prove the triangles are congruent using the HL Theorem:

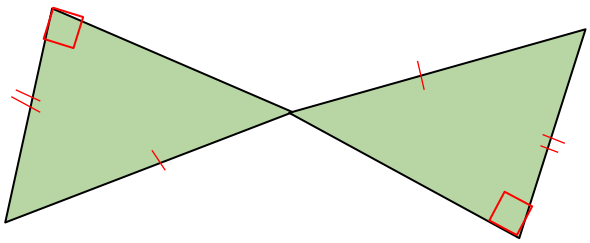
1.



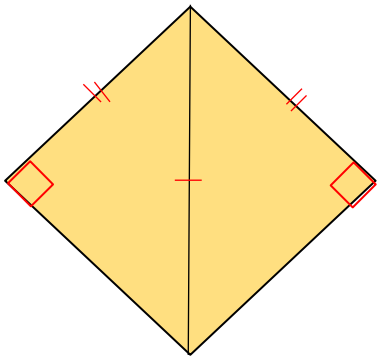
2.



3.



4.

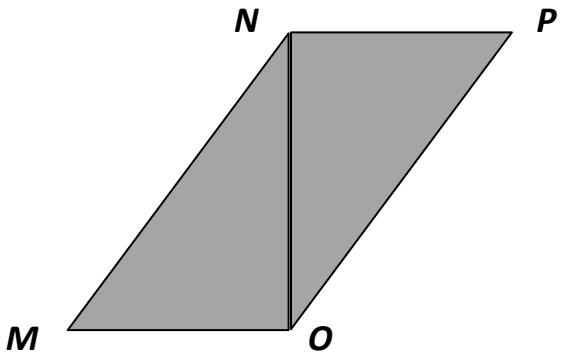


Proving Triangles Congruent: HL Theorem 15.4

Overview of Problems

*Example Set: B- **ANSWER KEY***

1.



Given: $NP \perp NO, MO \perp NO$

$MN \cong OP$

Prove: $\angle M \cong \angle P$

Statement	Reason
$NP \perp NO, MO \perp NO$	Given
$\angle MON, \angle PNO$ are rt. $\angle$'s	Def. of $\perp$ lines
$\triangle MON, \triangle PNO$ are rt. $\triangle$	Def. of rt. $\triangle$'s
$MN \cong OP$	Given
$NO \cong NO$	Ref. Prop.
$\triangle MON \cong \triangle PNO$	HL Thm.
$\angle M \cong \angle P$	CPCT are $\cong$

Proving Triangles Congruent: HL Theorem 15.4

Overview of Problems