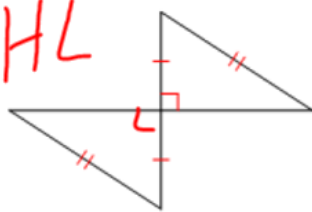
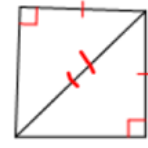
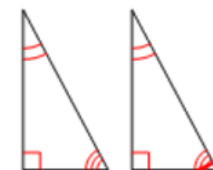
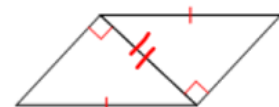
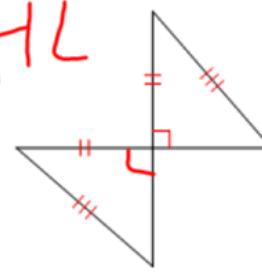

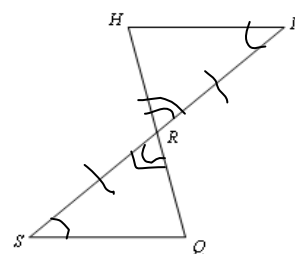


## 4.4 PRACTICE

State if the two triangles are congruent. If they are, state why.		
1.  <p style="color: red; font-size: 1.5em; margin-left: 20px;">HL</p>	2.  <p style="color: red; font-size: 1.5em; margin-left: 20px;">HL</p>	3.  <p style="color: red; font-size: 1.5em; margin-left: 20px;">NO! <del>AAA</del></p>
4.  <p style="color: red; font-size: 1.5em; margin-left: 20px;">HL</p>	5.  <p style="color: red; font-size: 1.5em; margin-left: 20px;">HL</p>	6.  <p style="color: red; font-size: 1.5em; margin-left: 20px;">NO! X</p>

**Mark the picture. Answer the question. Prove it.**

<p><b>7.</b>  <b>Given:</b> <math>R</math> is the midpoint of <math>\overline{SI}</math>  <math>\angle S \cong \angle I</math></p> <p><b>Prove:</b> <math>\angle Q \cong \angle H</math></p>	
--	---

**WHY ARE THE TWO TRIANGLES CONGRUENT? ASA**

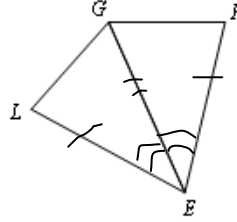
STATEMENTS	REASONS
1. $R$ is the midpoint of $\overline{SI}$ $\angle S \cong \angle I$	1. Given
2. $\overline{SR} \cong \overline{RI}$	2. Definition of Midpoint
3. $\angle SRQ \cong \angle HRI$	3. Vertical Angles are congruent
4. $\Delta SQR \cong \Delta IHR$	4. ASA
5. $\angle Q \cong \angle H$	5. CPCTC

Mark the picture. Answer the question. Prove it.

8.

Given:  $\overline{GE}$  is the angle bisector of  $\angle LEF$   
 $\overline{LE} \cong \overline{FE}$

Prove:  $\overline{LG} \cong \overline{FG}$



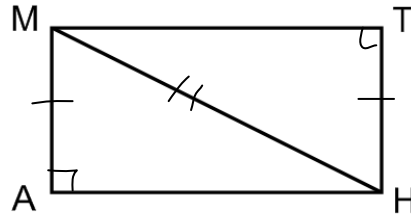
WHY ARE THE TWO TRIANGLES CONGRUENT? **SAS**

STATEMENTS	REASONS
1. $\overline{GE}$ is the angle bisector of $\angle LEF$ $\overline{LE} \cong \overline{FE}$	1. Given
2. $\angle LEG \cong \angle FEG$	2. Definition of Angle Bisector
3. $\overline{GE} \cong \overline{GE}$	3. Reflexive Property
4. $\triangle LEG \cong \triangle FEG$	4. SAS
5. $\overline{LG} \cong \overline{FG}$	5. CPCTC

9.

Given:  $\angle A$  and  $\angle T$  are right angles  
 $\overline{MA} \cong \overline{TH}$

Prove:  $\angle MHA \cong \angle HMT$



WHY ARE THE TWO TRIANGLES CONGRUENT? **HL**

STATEMENTS	REASONS
1. $\angle A$ and $\angle T$ are right angles $\overline{MA} \cong \overline{TH}$	1. Given
2. $\triangle MAH$ and $\triangle HMT$ are right triangles	2. Definition of right triangles
3. $\overline{MH} \cong \overline{MH}$	3. Reflexive Property
4. $\triangle MAH \cong \triangle HMT$	4. HL
5. $\angle MHA \cong \angle HMT$	5. CPCTC