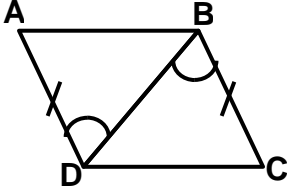
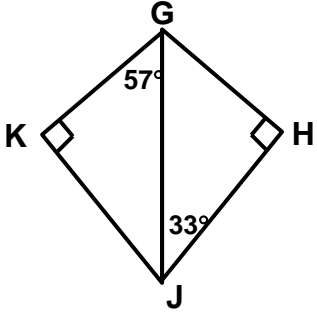


NAME \_\_\_\_\_ DATE \_\_\_\_\_ PER. \_\_\_\_\_

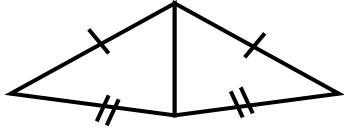
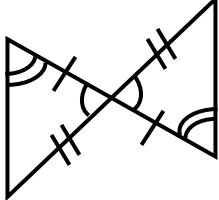
**Proving Triangles Congruent WITH SSS, SAS, ASA, AAS & HL**

Name the corresponding parts of these congruent triangles.

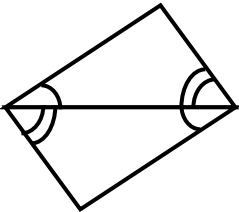
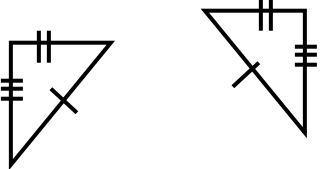
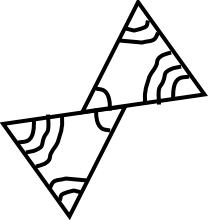
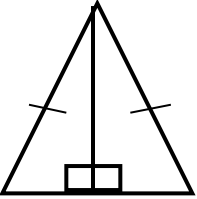
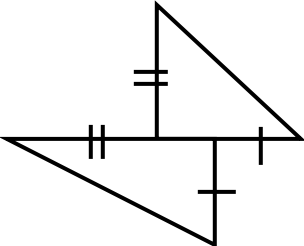
For each problem below, state each of the following: a) state the congruent parts b) state how the triangles are congruent c) state the congruence.

<p>1. a) _____          _____          _____</p> <p>b) _____</p> <p>c) <math>\triangle ADB \cong \triangle</math> _____</p>	
<p>2. a) _____          _____          _____</p> <p>b) _____</p> <p>c) <math>\triangle KGJ \cong \triangle</math> _____</p>	 <p>(Hint: Find all the missing angles first.)</p>

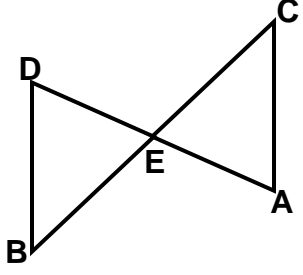
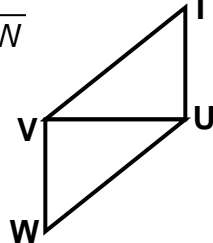
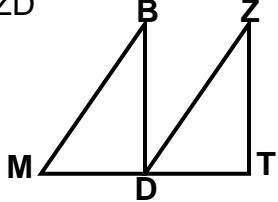
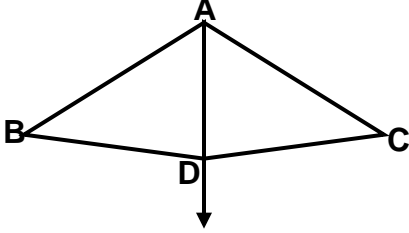
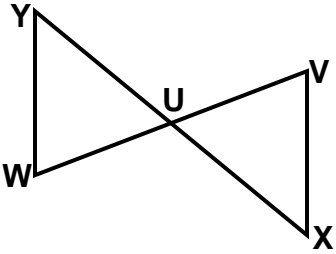
Which postulate (if any) should be used to show the triangles congruent? SSS, SAS, ASA, AAS, OR HL.

<p>3. _____</p>	
<p>4. _____</p>	

Which postulate (if any) should be used to show the triangles congruent? **SSS, SAS, ASA, AAS, HL** or **NONE**.

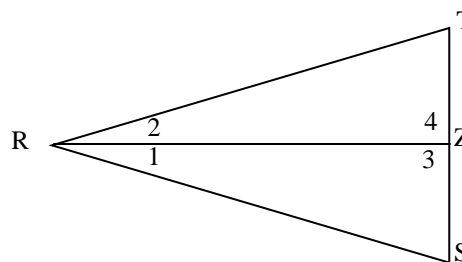
<p>5. _____</p>	
<p>6. _____</p>	
<p>7. _____</p>	
<p>8. _____</p>	
<p>9. _____</p>	

Mark the drawing to show the given information and fill in the blanks.

<p>10. <math>\triangle DEB \cong \triangle</math> _____</p> <p>by _____.</p>	<p><math>\overline{DE} \cong \overline{EC}</math> and <math>\overline{BE} \cong \overline{AE}</math></p> 
<p>11. <math>\triangle TUV \cong \triangle</math> _____</p> <p>by _____</p>	<p><math>\angle TVU \cong \angle WUV</math> and <math>\overline{VT} \cong \overline{UW}</math></p> 
<p>12. <math>\triangle MDB \cong \triangle</math> _____</p> <p>by _____</p>	<p>D is the midpoint of <math>\overline{MT}</math>, <math>\angle MDB</math> and <math>\angle T</math> are right angles, and <math>\overline{BM} \cong \overline{ZD}</math></p> 
<p>13. <math>\triangle BAD \cong \triangle</math> _____</p> <p>by _____</p>	<p><math>\overrightarrow{AD}</math> is the angle bisector of <math>\angle BAC</math> and <math>\overline{BA} \cong \overline{CA}</math></p> 
<p>14. <math>\triangle WUY \cong \triangle</math> _____</p> <p>by _____</p>	<p>U is the midpoint of both <math>\overline{YX}</math> and <math>\overline{WV}</math>, and <math>\overline{WY} \cong \overline{VX}</math></p> 

**Prove each from the given information.**

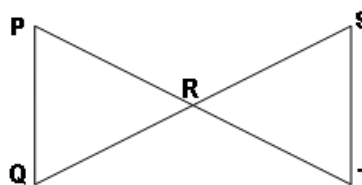
15) GIVEN:  $\overline{RZ}$  bisects  $\overline{TS}$ ;  $\angle 3 \cong \angle 4$



PROVE:  $\triangle RZS \cong \triangle RZT$

STATEMENTS	REASONS
1. $\overline{RZ}$ bisects $\overline{TS}$	1.
2.	2. Given
3. $\overline{TZ} \cong \overline{SZ}$	3.
4. $\overline{RZ} \cong \overline{RZ}$	4.
6.	6.

16) GIVEN:  $\angle Q \cong \angle S$ ;  
R is the midpoint of  $\overline{QS}$ .



PROVE:  $\triangle PRQ \cong \triangle TRS$

STATEMENTS	REASONS
1.	1. Given
2. R is the midpoint of $\overline{QS}$ .	2.
3. $\overline{QR} \cong \overline{SR}$	3.
4.	4. Vertical Angles are $\cong$
5.	5.