

**Geometry Chapter 4**  
**Theorem, Postulate and Corollary of Congruent Triangles**

<b><u>Theorem, Postulate or Corollary</u></b>	<b><u>Theorem</u></b>	<b><u>Your words</u></b>	<b><u>Visual</u></b>
<i>Isosceles Triangle Theorem</i>	If two sides of a triangle are congruent, then the angles opposite those sides are congruent.		
<i>Converse of Isosceles Triangle Theorem</i>	If two angles of a triangle are congruent, then the sides opposite those angles are congruent.		
<i>Theorem 4-5</i>	The bisector of the vertex of an isosceles triangle.		
<i>Corollary to the Isosceles Triangle Theorem</i>	If a triangle is equilateral, then the triangle is equiangular.		
<i>Corollary to the Converse Isosceles Triangle Theorem</i>	If a triangle is equiangular, then the triangle is equilateral.		
<i>HL</i>	If the hypotenuse and a leg of one right triangle are congruent to the hypotenuse and a leg of another right triangle, then the triangles are congruent.		

<b><u>Theorem, Postulate or Corollary</u></b>	<b><u>Theorem</u></b>	<b><u>Your words</u></b>	<b><u>Visual</u></b>
<i>Theorem 4-1</i>	If two angles of one triangle are congruent to two angles of another triangle, then the third angles are congruent		
<i>SSS</i>	If three sides of one triangle are congruent to the three sides of another triangle, then the two triangles are congruent		
<i>SAS</i>	If two sides and the included angle of one triangle are congruent to the two sides and the included angle of another triangle, then the two triangles are congruent		
<i>ASA</i>	If two angles and the included side of one triangle are congruent to the two angles and the included side of another triangle, then the two triangles are congruent		
<i>AAS</i>	If two angles and a nonincluded side of one triangle are congruent to the two angles and a nonincluded side of another triangle, then the two triangles are congruent		