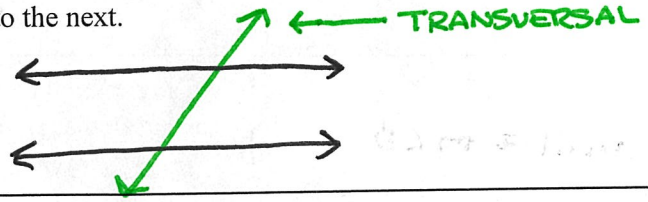
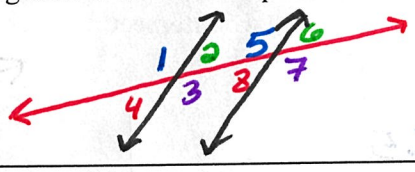
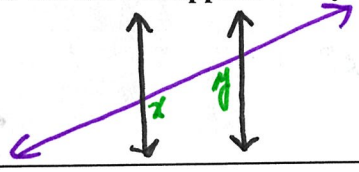
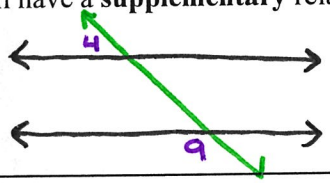
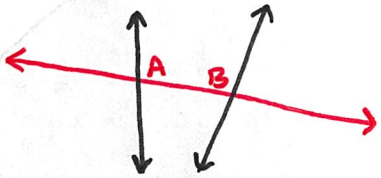
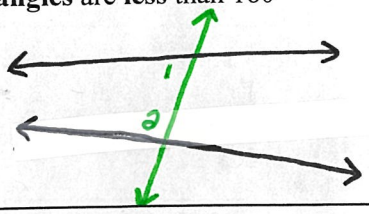
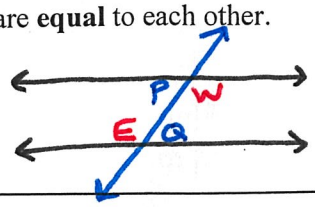
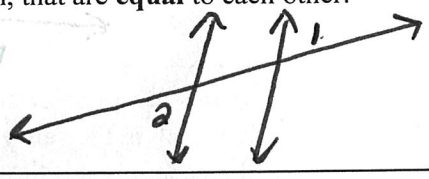
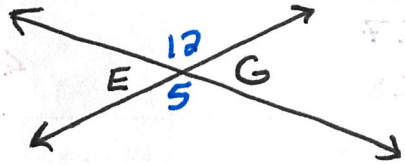
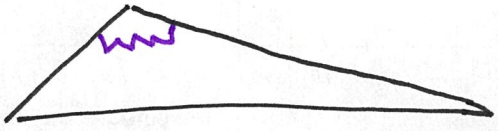
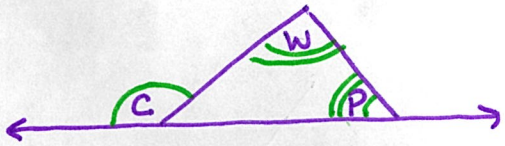
Vocabulary	Definition
Transversal	This is what one calls the line that **cuts through** a set of parallel lines. One often uses this line to **carry** attributes from one of the parallel lines to the next. 
Corresponding Angles $\angle 1 \cong \angle 5$ $\angle 2 \cong \angle 6$ $\angle 3 \cong \angle 7$ $\angle 4 \cong \angle 8$	One uses this to describe any two angles on the **same side** of the transversal, in the **same position**, that will fall on different lines but will be congruent if the lines are parallel. 
Consecutive Interior $m\angle x + m\angle y = 180^\circ$	Two angles on the **same side** of the transversal on the **inside** of the parallel lines will have a **supplementary** relationship. 
Consecutive Exterior $m\angle 4 + m\angle 9 = 180^\circ$	Two angles on the **same side** of the transversal on the **outside** of the parallel lines will have a **supplementary** relationship. 
The lines will diverge on this side of the transversal $m\angle A + m\angle B > 180^\circ$	This is the result of having a set of lines and a transversal where the **consecutive angles** are **greater** than 180° 
The lines will converge on this side of the transversal $m\angle 1 + m\angle 2 < 180^\circ$	This is the result of having a set of lines and a transversal where the **consecutive angles** are **less** than 180° 

Alternate Interior $\angle P \cong \angle Q$ $\angle W \cong \angle E$	Two angles on the **opposite sides** of the transversal, **inside** the parallel lines, that are **equal** to each other. 
Alternate Exterior $m\angle 1 = m\angle 2$	Two angles on the **outside** of parallel lines, on **opposite sides** of the transversal, that are **equal** to each other. 
Vertical Angles $\angle E \cong \angle G$ $m\angle 12 = m\angle 5$	Two **intersecting lines** create angles that are opposite and **equal** to each other. 
Linear Pair $m\angle 3 + m\angle 4 = 180^\circ$	A set of angles that add up to 180° and will create a **line**. 
Angle Sum for Triangle	The **sum** of all interior angles in a triangle shall equal 180°  $\angle A + \angle B + \angle C = 180^\circ$
Angle Sum for Quadrilaterals	The **sum** interior angle for a convex quadrilateral will equal 360°  $\sum \angle s = 360^\circ$
Summit Angle	The angle at the **top** of the triangle. 
Base Angles	The angles at the **bottom** of a triangle. 

Exterior Angle Theorem $m\angle C = m\angle W + m\angle P$	The two angles farthest from the exterior of the triangle, when added together, will give you the value of the exterior angle. 
Supplementary angles $m\angle x + m\angle y = 180^\circ$	When two angles add up to 180° 
Complementary angles $m\angle 1 + m\angle 2 = 90^\circ$	When two angles add up to 90°