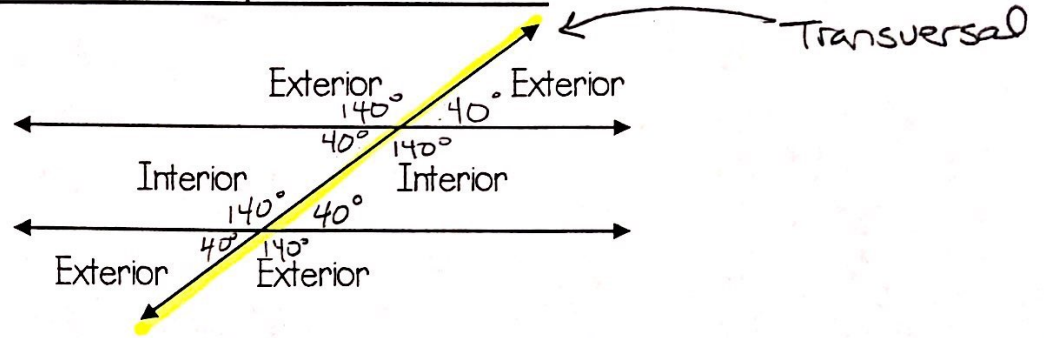


# Angle Pairs Created by Parallel Lines Cut by a Transversal

## Vocabulary

- Transversal - A line that crosses parallel lines to create pairs of congruent and supplementary angles
- congruent - Having the same measurement  $\cong \triangle \triangle$
- Supplementary - Angles that add up to  $180^\circ$   $\frac{1}{2} \frac{1}{2} \angle 1 + \angle 2 = 180^\circ$

## Angle Pairs in Parallel Lines Cut by a Transversal



- Corresponding - Angles that lie on the same side of the transversal and on the same side of the parallel lines. These angles are in the same "corner" and are congruent
- Alternate Interior - Angles on opposite sides of the transversal and inside the two parallel lines. These angles are congruent
- Alternate Exterior - Angles on opposite sides of the transversal and outside the parallel lines. These angles are congruent
- Same Side Interior - Angles on the same side of the transversal and inside the parallel lines. These angles are supplementary
- Same Side Exterior - Angles on the same side of the transversal and outside the parallel lines. These angles are supplementary
- Vertical - Angles that are across from each other and are formed by any intersecting lines (not just parallel lines and transversals). These angles are congruent.

