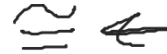


Given Parallel Lines and a Transversal



Alternate Interior

$$\angle 5 + \angle 3$$

$$\angle 2 + \angle 8$$

Alternate interior angles are \cong .

Corresponding Angles

$$\angle 1 + \angle 5 \quad \angle 3 + \angle 7$$

$$\angle 2 + \angle 6 \quad \angle 4 + \angle 8$$

Corresponding angles are \cong .

Alternate Exterior

$$\angle 1 + \angle 7$$

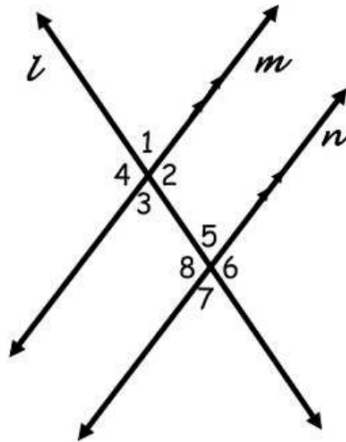
$$\angle 4 + \angle 6$$

Alternate exterior angles are \cong .

Same Side Interior or Consecutive Interior

$$\angle 2 + \angle 5, \angle 3 + \angle 8$$

Same side interior or consecutive interior angles are Supplementary.



Same Side Exterior or Consecutive Exterior

$$\angle 1, \angle 6 \quad \angle 7, \angle 4$$

Same side exterior or consecutive exterior angles are Supplementary.

Vertical Angles

$$\angle 1, \angle 3 \quad \angle 5, \angle 7 \quad \angle 4, \angle 2 \quad \angle 8, \angle 6$$

Vertical angles are \cong .

$$\begin{array}{l} \angle 1 + \angle 2 \quad \angle 1, \angle 4 \quad \text{Linear Pair} \quad \angle 5 + \angle 6 \\ \angle 2 + \angle 3 \quad \angle 5 + \angle 8 \quad \angle 6 + \angle 7 \\ \angle 3, \angle 4 \quad \text{Linear pair of angles are} \end{array}$$

Supplementary