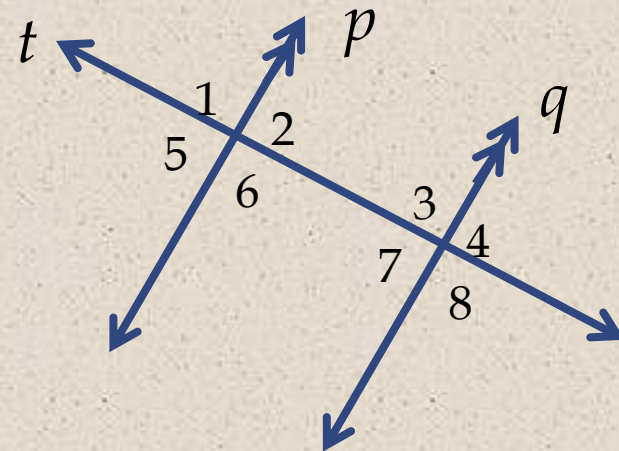


# KEY CONCEPTS

If two parallel lines are cut by a transversal (if  $p \parallel q$ ), then:



Postulate/Theorem	Then:	Examples
Corresponding Angles Postulate	Corr. angles are congruent	$\angle 1 \cong \angle 3$ ; $\angle 2 \cong \angle 4$ $\angle 5 \cong \angle 7$ ; $\angle 6 \cong \angle 8$
Alternate Interior Angles Theorem	Alt. int. angles are congruent	$\angle 2 \cong \angle 7$ ; $\angle 3 \cong \angle 6$
Same-Side Interior Angles Theorem	SS int. angles are supplementary	$m\angle 2 + m\angle 3 = 180$ $m\angle 6 + m\angle 7 = 180$
Alternate Exterior Angles Theorem	Alt. ext. angles are congruent	$\angle 1 \cong \angle 8$ ; $\angle 4 \cong \angle 5$