When Two Parallel Lines Are Cut By a Transversal, What Angle Pair Relationships Exist?

(Day 1)

Key

Corresponding Angles

In same location of 4 angles

Ex: ∠1 & ∠5 (top right)

Corresponding angles are ≅.

(congruent)

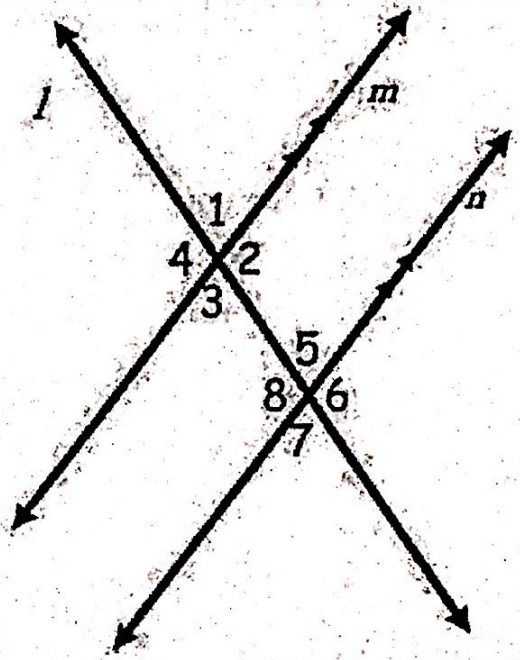
Alternate Interior

Inside & Across

Ex: ∠2 & ∠8

Alternate interior angles are ≅.

(congruent)



Alternate Exterior

Outside & Across

Ex: ∠1 & ∠7

Alternate exterior angles are ≅.

(congruent)

Same Side Interior or Consecutive Interior

Ex: ∠2 & ∠5

Same side interior or consecutive interior angles are supplementary.

(add to 180°)

Same Side Exterior or Consecutive Exterior

Ex: ∠1 & ∠6

Same side exterior or consecutive exterior angles are supplementary.

(add to 180°)

Vertical Pair

Ex: ∠5 & ∠7

Vertical angles are ≅.

(congruent)

Linear Pair

Ex: ∠5 & ∠8

Linear pair of angles are suppl.

(add to 180°)