Name: Key

Parallels Cut by a Transversal Notes
Flipped Classroom

When a transversal intersects 2 parallel lines, 4 angles are formed.
These angles are given special names and have special relationships.

Interior angles lie between the two lines.

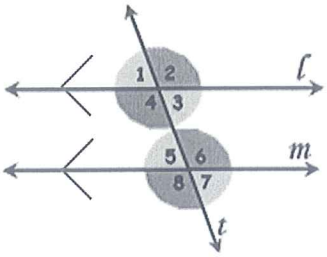
Alternate Interior angles are on the opposite sides of the transversal Example: ∠3 and ∠ 5

Consectutive Interior angles are on the same side of the transversal. Example: ∠3 and ∠6

Exterior angles lie outside the two lines.

Alternate Exterior angles are on the opposite sides of the transversal. Example: ∠2 and ∠8

Corresponding angles on angle in the Exterior and the other in the Interior but on the same side of The transversal. Example: ∠8 and ∠4



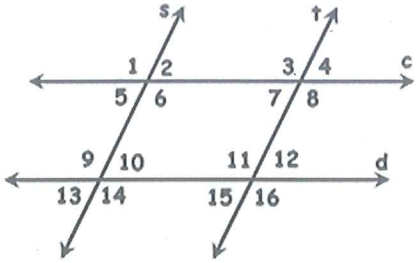
Please note the following properties.

Alternate interior angles are congruent.
Alternate exterior angles are congruent.
Corresponding angles are congruent.
Consecutive interior angles are supplementary.

Practice Example:

s || t and c || d.

Name all the angles that are congruent to ∠1.
Give a reason for each answer.



∠3 ≅ ∠1 *corresponding angles*

∠6 ≅ ∠1 *vertical angles*

∠8 ≅ ∠1 *alternate exterior angles*

∠9 ≅ ∠1 *corresponding angles*

∠14 ≅ ∠1 *alternate exterior angles*

∠11 ≅ ∠9 ≅ ∠1 *corresponding angles*

∠16 ≅ ∠14 ≅ ∠1 *corresponding angles*

For more help, see the video at http://www.youtube.com/watch?v=dnvBZSY2aq8