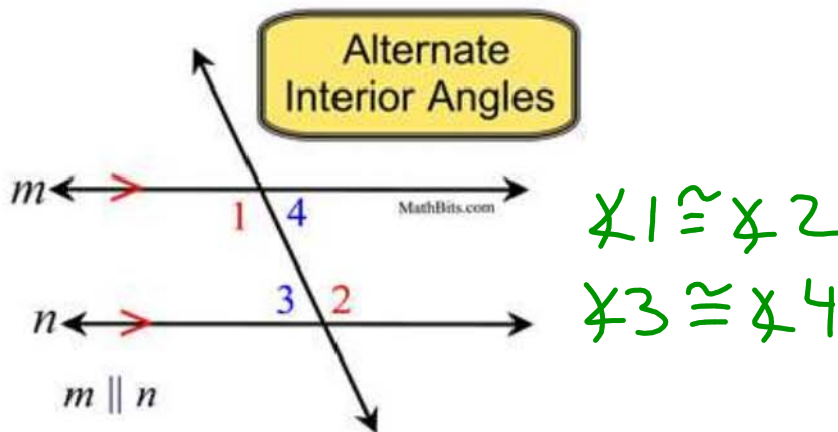


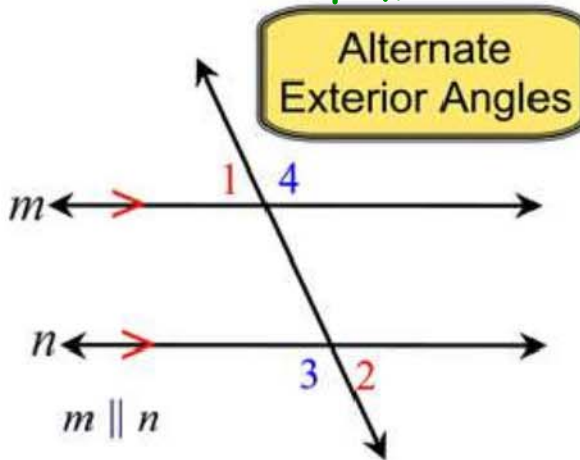
Geometry CC – Unit 1
 Lesson 3: Parallel Lines!

Name: _____
 Date: _____

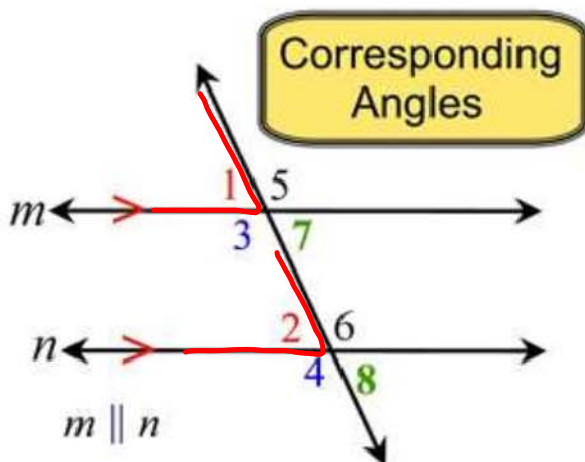
Recall! When a transversal intersects two or more lines, a series of angles are formed. Certain pairs of angles are given specific "names" based upon their locations in relation to the lines. These specific names may be used whether the lines involved are parallel or not parallel. Let's look at some of these specific names!



Theorem: If two parallel lines are cut by a transversal, alternate interior angles are congruent.



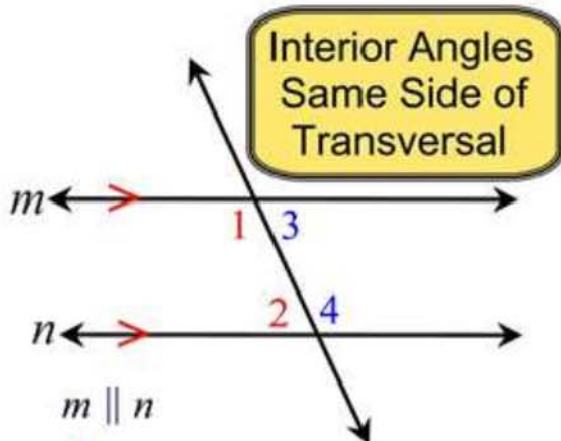
Theorem: If two parallel lines are cut by a transversal, alternate exterior angles are congruent.



$m \angle 7 = \text{measure of } \angle 7$

- $\angle 1$ and $\angle 2$ are corresponding angles.
- $\angle 3$ and $\angle 4$ are corresponding angles.
- $\angle 5$ and $\angle 6$ are corresponding angles.
- $\angle 7$ and $\angle 8$ are corresponding angles.

Theorem: If two parallel lines are cut by a transversal, the corresponding angles are congruent.



consecutive interior angles

$\angle 1 + \angle 2 = 180^\circ$
 $\angle 3 + \angle 4 = 180^\circ$

Theorem: If two parallel lines are cut by a transversal, the interior angles on the same side of the transversal are supplementary