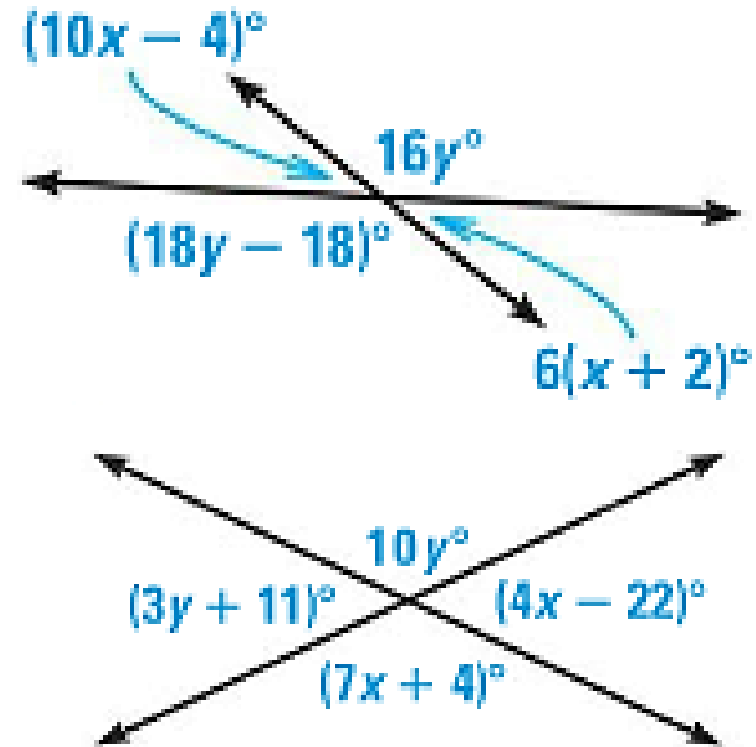


Monday, October 6

Objective:

Students will be able to identify relationships between angles formed by parallel lines and transversals

DO NOW



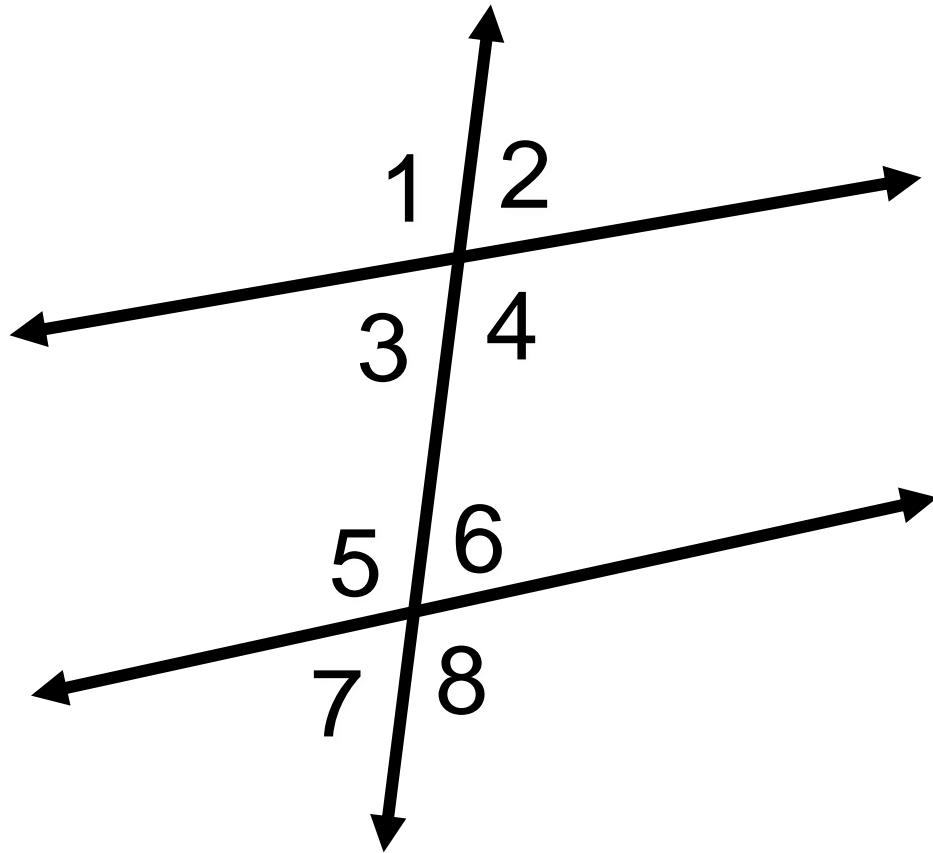
HOMEWORK: p.157 #2-20

3.2 Parallel Lines and Transversals

- Review material for 3 minutes
- We will have 7 minutes to finish mini quiz

3.2 Parallel Lines and Transversals

If two parallel lines are cut by a transversal, then

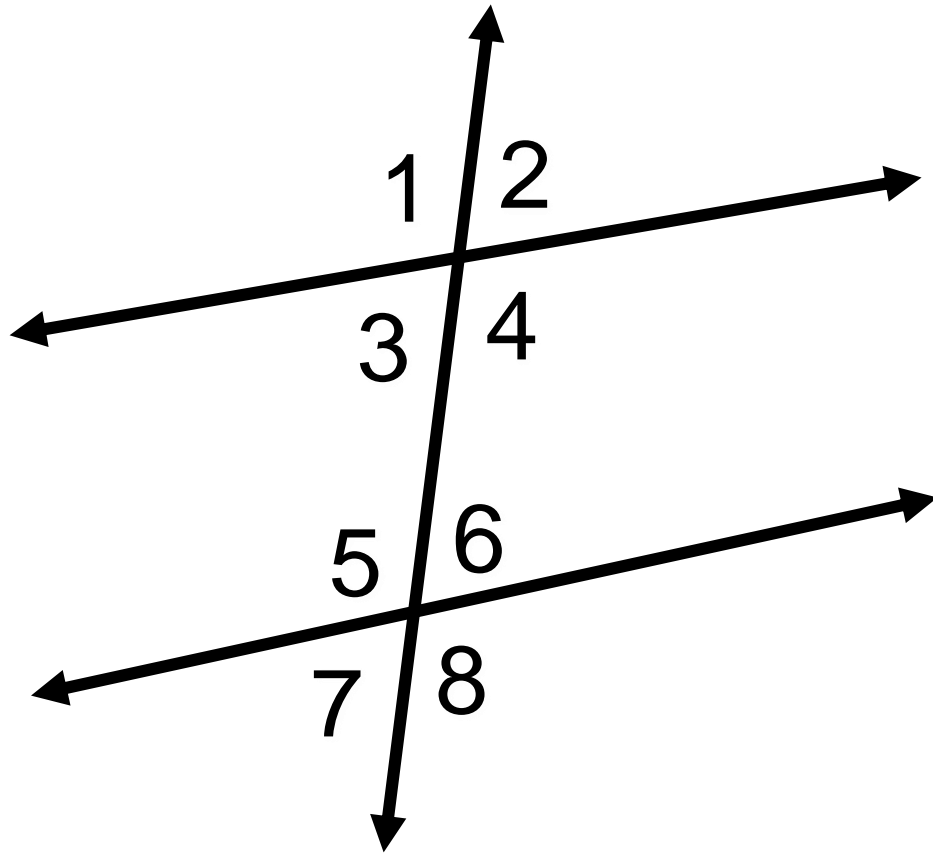


the pairs of alternate interior angles are congruent

Alternate Interior Angles Theorem

3.2 Parallel Lines and Transversals

If two parallel lines are cut by a transversal, then

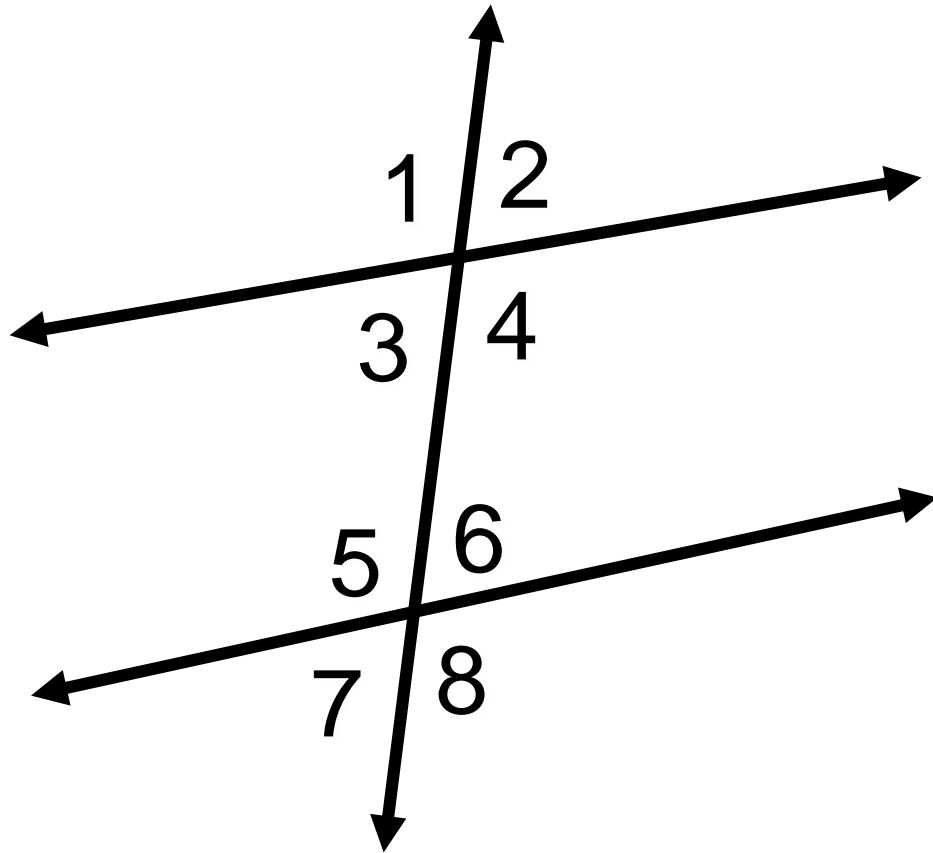


the pairs of alternate exterior angles are congruent

Alternate Exterior Angles Theorem

3.2 Parallel Lines and Transversals

If two parallel lines are cut by a transversal, then

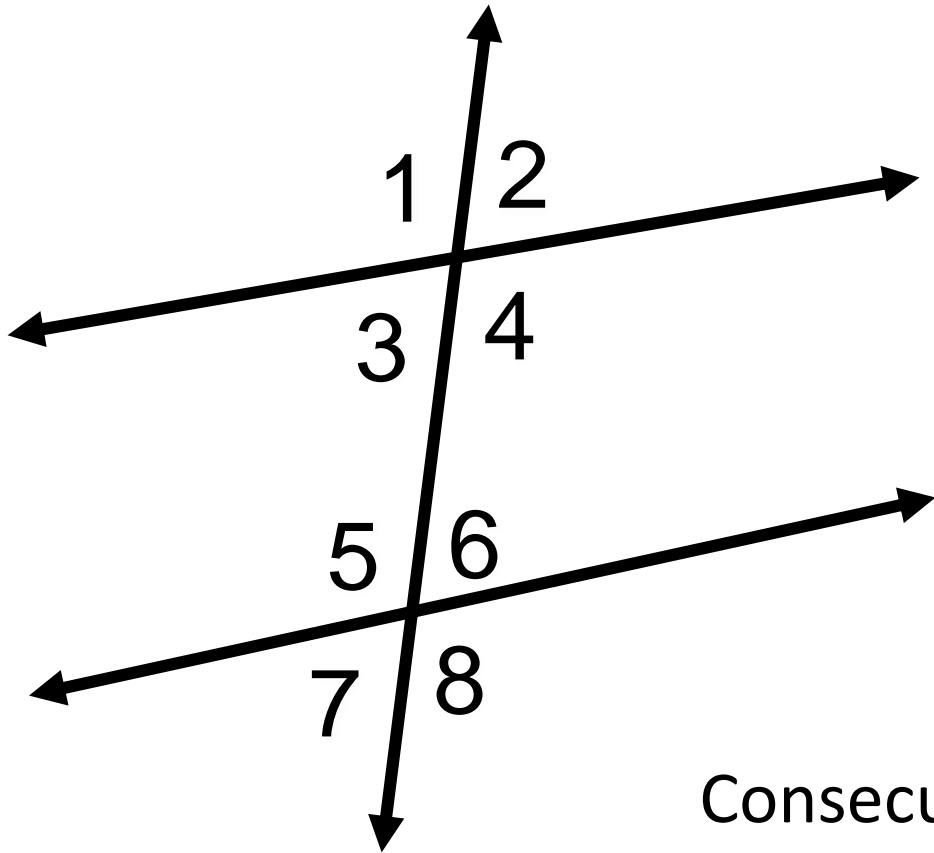


the pairs of corresponding angles are congruent

Corresponding Angles Postulate

3.2 Parallel Lines and Transversals

If two parallel lines are cut by a transversal, then



then the pairs of consecutive (same side) interior angles are supplementary.

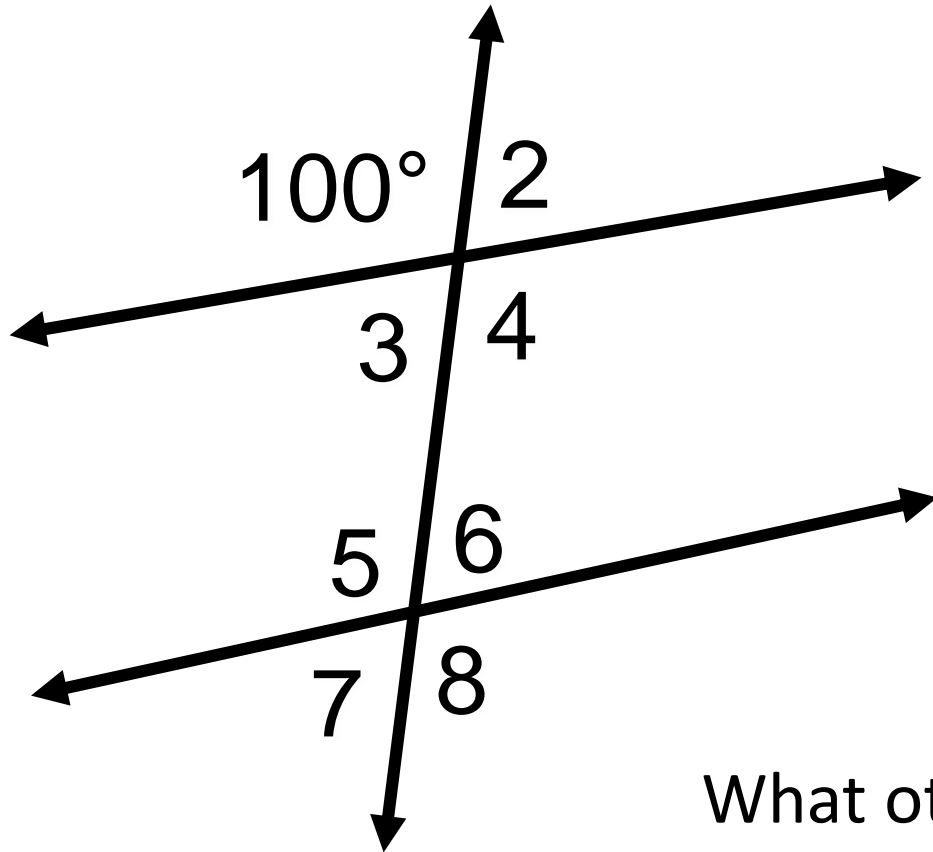
$$\angle 3 + \angle 5 = 180^\circ$$

$$\angle 4 + \angle 6 = 180^\circ$$

Consecutive (Same Side) Interior Angles Theorem

3.2 Parallel Lines and Transversals

Find $m\angle 5$



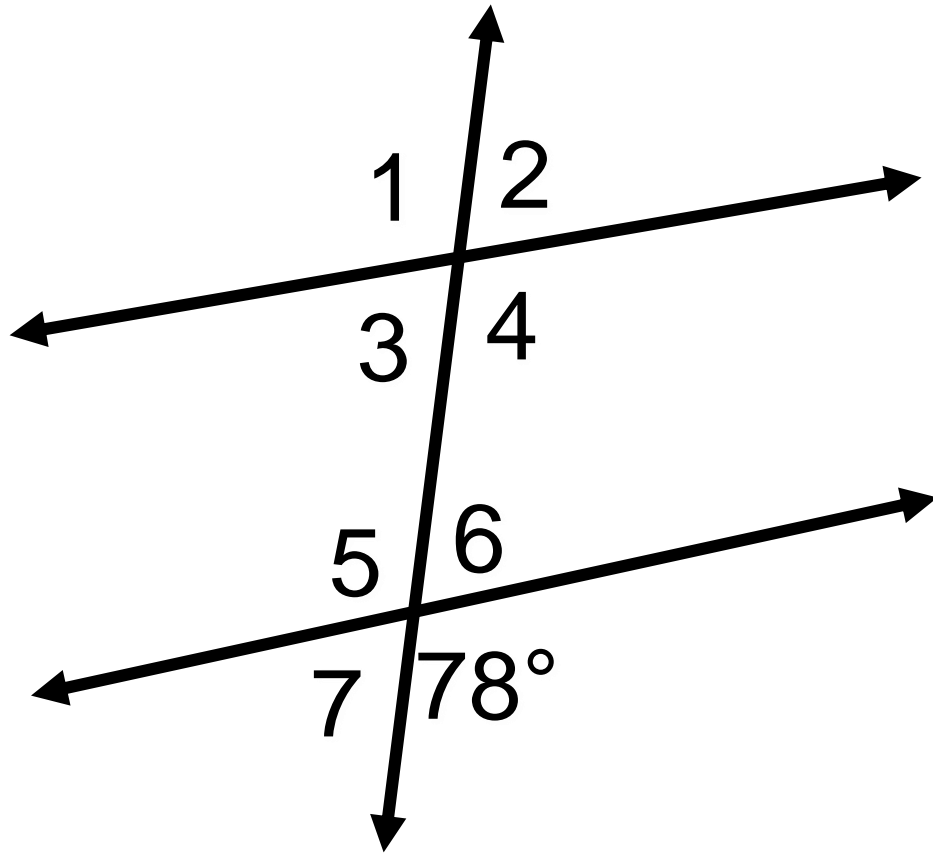
Why?

Corresponding Angles Postulate

What other angles measure 100° ?

3.2 Parallel Lines and Transversals

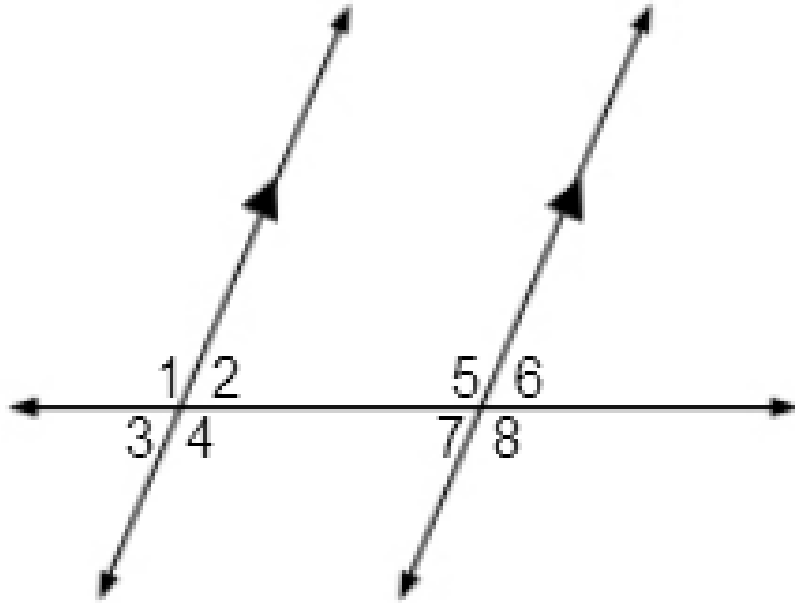
Find $m\angle 5$



Why?

Find $m\angle 1$

3.2 Parallel Lines and Transversals



What postulate or theorem justifies the statement about the diagram?

$$\angle 4 \cong \angle 5$$

Corresponding Angles Postulate

3.2 Parallel Lines and Transversals

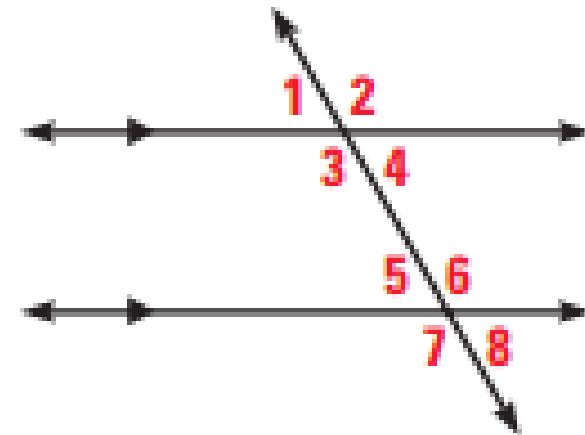
State the postulate or theorem that justifies the statement.

$$\angle 2 \cong \angle 7$$

$$m\angle 3 + m\angle 5 = 180^\circ$$

$$\angle 4 \cong \angle 5$$

$$\angle 2 \cong \angle 6$$



Corresponding Angles Postulate

Corresponding Angles Postulate