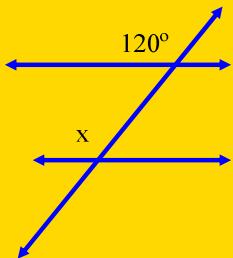


### Ch 3.4 Parallel lines and transversals

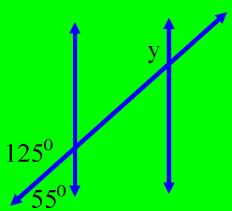
**Corresponding angles postulate** - if 2 parallel lines are cut by a transversal then the angles are congruent.

Ex1a)



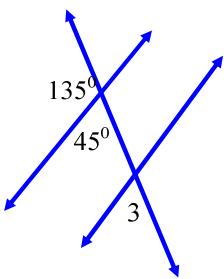
Oct 28-9:06 AM

Ex1b)



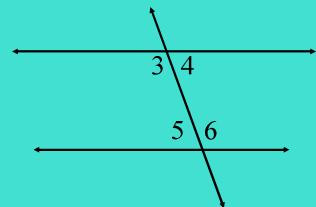
Oct 28-9:08 AM

1 Find  $\angle 3$



Oct 28-9:10 AM

Theorem 3.5: **Alternate Interior Angles Theorem**- If 2 lines  $\parallel$  are cut by a transversal, then alternate interior angles are  $\cong$ .

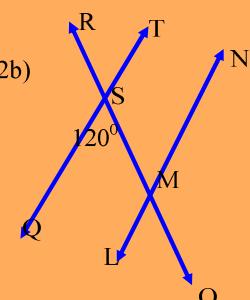


Ex2a)

If  $\angle 5 = 40^\circ$  what does  $\angle 3, 4$  and  $6 = ?$

Oct 28-9:13 AM

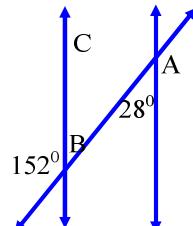
Ex 2b)



find  $m\angle SMN$   
 $m\angle TSM$   
 $m\angle LMS$

Oct 28-9:17 AM

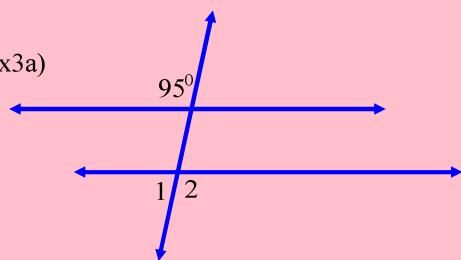
2 Find the  $m\angle CBA$



Oct 28-9:19 AM

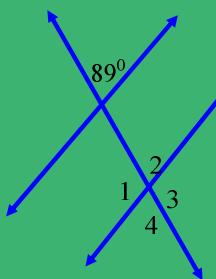
Th. 3.6: **Alternate Exterior Angles Theorem** -  
If  $2 \parallel$  lines are cut by a transversal, then the alternate exterior angles are  $\cong$ .

Ex3a)



Oct 28-9:34 AM

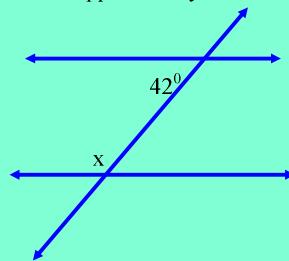
Ex3b) Find all the numbered angles.



Oct 28-9:37 AM

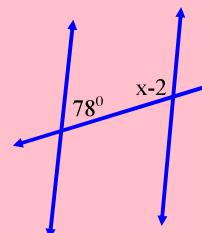
Th 3.7: **Same - Side Angles Theorem** -  
If  $2 \parallel$  are cut by a transversal, then the same-side angles are supplementary.

Ex 4a)



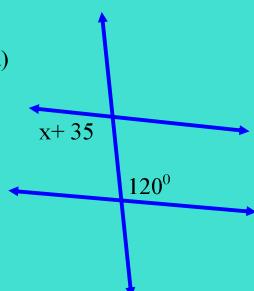
Oct 28-9:48 AM

Ex4b)



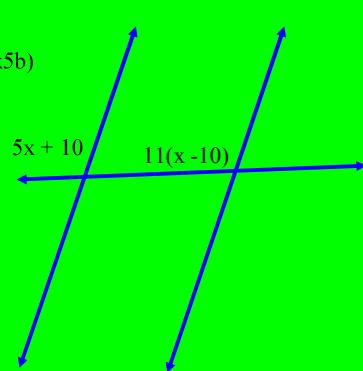
Oct 28-9:52 AM

Ex 5a)



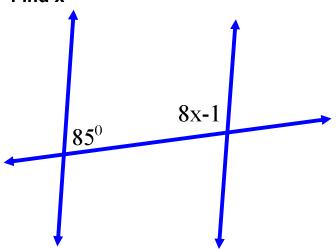
Oct 28-9:53 AM

Ex5b)



Oct 28-9:54 AM

3 Find x



Oct 28-9:55 AM