

Notes - Day 1 Transversals

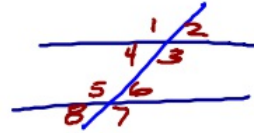
Date \_\_\_\_\_

Period \_\_\_\_\_

1) Parallel Line and a Transversal

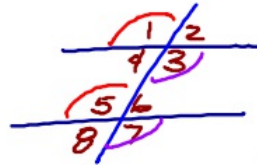
Two lines that never cross.

A line that crosses parallel lines



Corresponding Angles

Same position on the same side of the transversal.



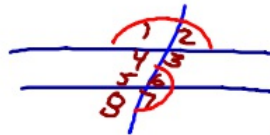
$\angle 1 \cong \angle 5$

$\angle 3 \cong \angle 7$

Congruent (equal)

Linear Pair Angles

Adjacent & Suppl.



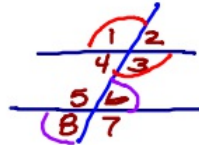
$\angle 1 \cong \angle 2$

$\angle 6 \cong \angle 7$

Supplementary (=180°)

Vertical Angles

Across from each other



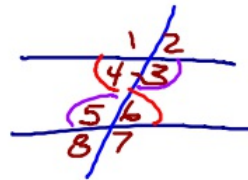
$\angle 1 \cong \angle 3$

$\angle 6 \cong \angle 8$

Congruent

Alternating Interior Angles

opposite sides of the transversal (railroad tracks) Inside



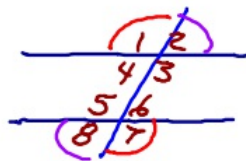
$\angle 4 \cong \angle 6$

$\angle 3 \cong \angle 5$

Congruent

Alternating Exterior Angles

opposite sides of the transversal. outside parallel lines



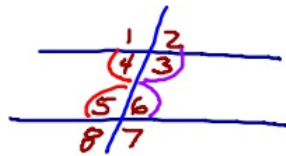
$\angle 1 \cong \angle 7$

$\angle 2 \cong \angle 8$

Congruent.

Consecutive Interior Angles

Same side of the transversal Inside



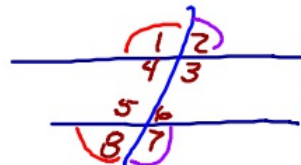
$\angle 4 \cong \angle 5$

$\angle 3 \cong \angle 6$

Supplementary

Consecutive Exterior Angles

Same side of the transversal Outside

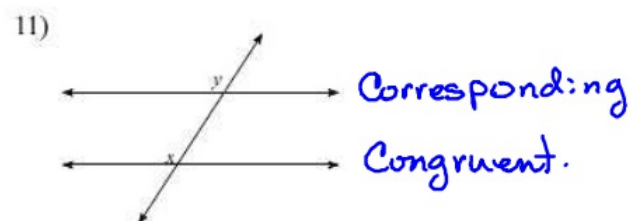
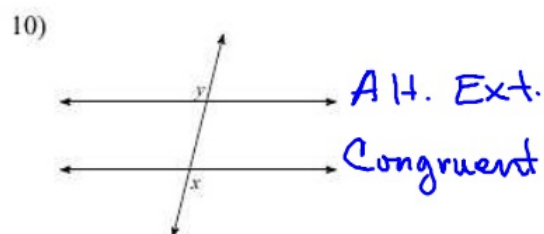
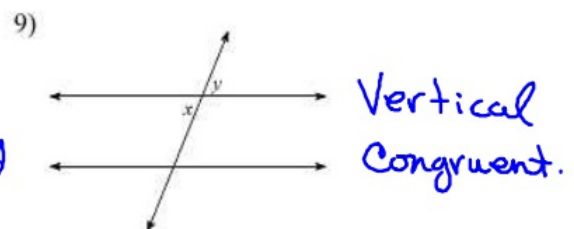
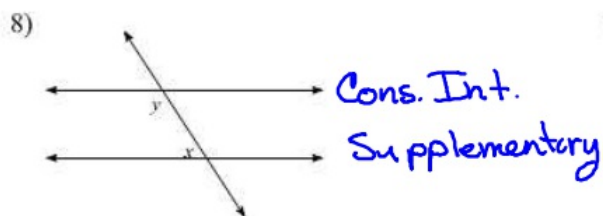
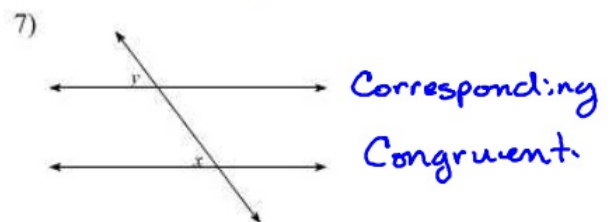
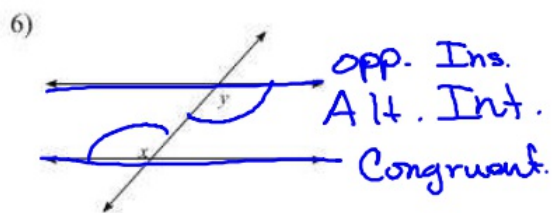
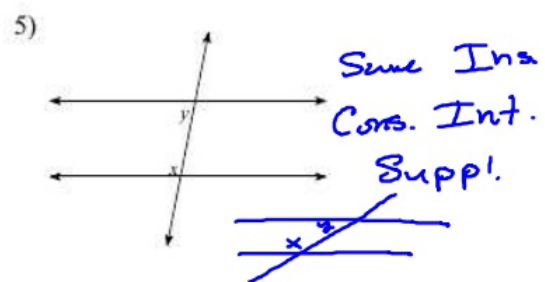
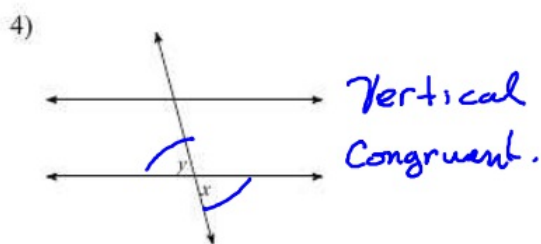
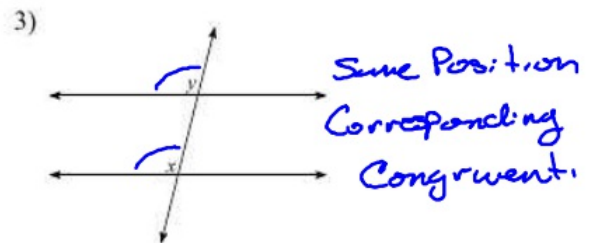
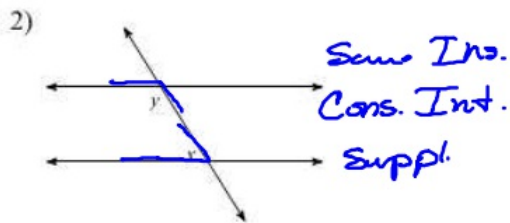


$\angle 1 \cong \angle 8$

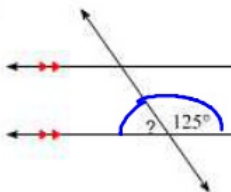
$\angle 2 \cong \angle 7$

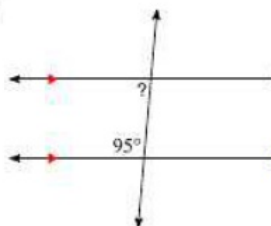
Supplementary.

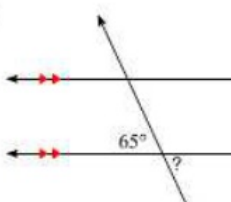
Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent.

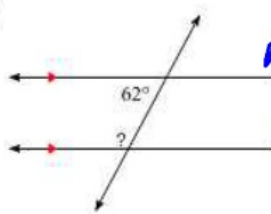


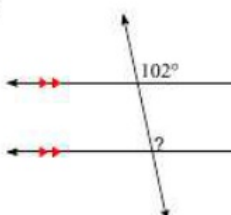
A) Identify the pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent. *Linear Pair.*  
 B) Find the measure of each angle indicated or solve for x.

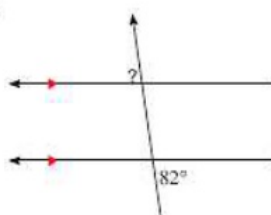
12)  A) *Linear Pair.*  
 B) 
$$\begin{array}{r} ? + 125 = 180 \\ -125 \quad -125 \\ \hline ? = 55^\circ \end{array}$$

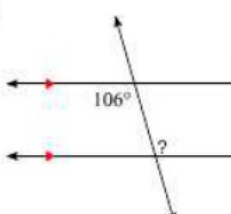
13)  A) *Same Ins. Cons. Int.*  
 B) 
$$\begin{array}{r} ? + 95 = 180 \\ -95 \quad -95 \\ \hline ? = 85^\circ \end{array}$$

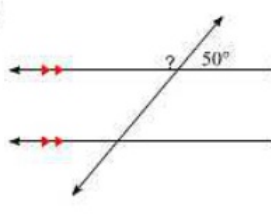
14)  A) *Vertical.*  
 B)  $65^\circ$

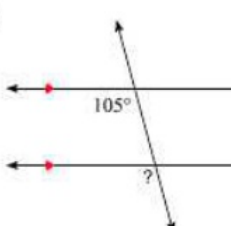
15)  A) *Cons. Int.*  
 B) 
$$\begin{array}{r} ? + 62 = 180 \\ -62 \quad -62 \\ \hline ? = 118^\circ \end{array}$$

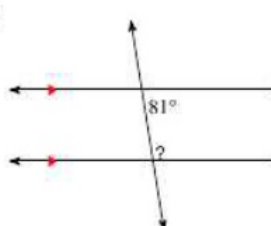
16)  A) *Corresponding.*  
 B)  $102^\circ$

17)  A) *Alt. Ext.*  
 B)  $82^\circ$

18)  A) *Alt. Int.*  
 B)  $106^\circ$

19)  A) *Linear Pair.*  
 B) 
$$\begin{array}{r} ? + 50 = 180 \\ -50 \quad -50 \\ \hline ? = 130^\circ \end{array}$$

20)  A) *Corresponding.*  
 B)  $105^\circ$

21)  A) *Cons. Int.*  
 B) 
$$\begin{array}{r} ? + 81 = 180 \\ -81 \quad -81 \\ \hline ? = 99^\circ \end{array}$$