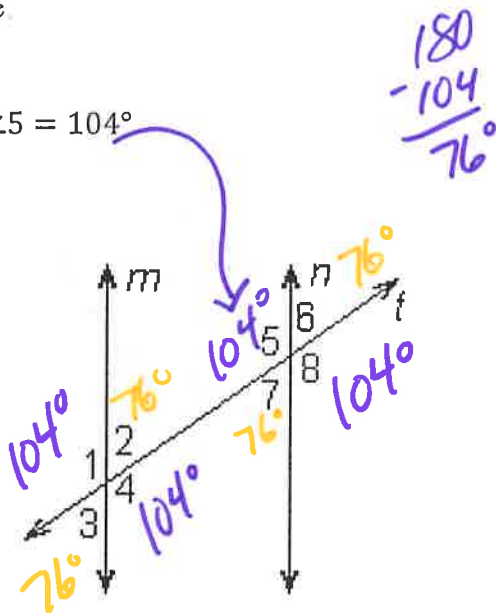


## Identifying Angles

Word	Notation	Diagram
Parallel <i>Two lines that will never intersect</i>		
Perpendicular <i>Two lines that intersect @ a perfect 90° angle</i>		
Word	Identify	Diagram
Transversal <i>A line that intersects two lines in a plane.</i>	<i>line t is a transversal</i>	$j \parallel k$ 
Corresponding Angles <i>Angles that are in the same relative position</i> * Corresponding angles are congruent	$\sphericalangle 1$ and $\sphericalangle 5$ $\sphericalangle 2$ and $\sphericalangle 6$ $\sphericalangle 3$ and $\sphericalangle 7$ $\sphericalangle 4$ and $\sphericalangle 8$	
Alternate Interior Angles <i>Angles inside the two lines, on opposite sides of the transversal.</i> * All int angles are congruent	$\sphericalangle 5$ and $\sphericalangle 4$ $\sphericalangle 6$ and $\sphericalangle 3$	
Alternate Exterior Angles <i>Angles outside the two lines that are on opposite sides of the transversal.</i> * All ext. angles are congruent	$\sphericalangle 1$ and $\sphericalangle 7$ $\sphericalangle 2$ and $\sphericalangle 8$	

Identify the relationship of the angles given. Find the value of the missing angles, if possible.

1.  $\angle 5 = 104^\circ$



Corresponding Angles:

$\angle 1$  and  $\angle 5$        $\angle 2$  and  $\angle 6$   
 $\angle 3$  and  $\angle 7$        $\angle 4$  and  $\angle 8$

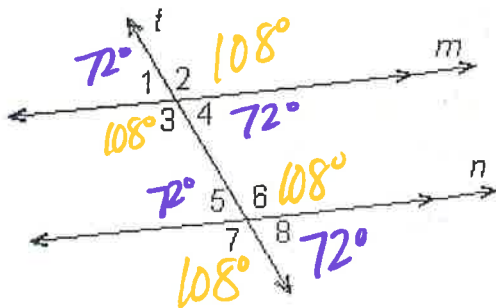
Alternate Interior Angles:

$\angle 2$  and  $\angle 7$        $\angle 4$  and  $\angle 5$

Alternate Exterior Angles:

$\angle 1$  and  $\angle 8$        $\angle 3$  and  $\angle 6$

2.  $m\angle 8 = 72^\circ$



Corresponding Angles:

$\angle 1$  and  $\angle 5$        $\angle 2$  and  $\angle 6$   
 $\angle 3$  and  $\angle 7$        $\angle 4$  and  $\angle 8$

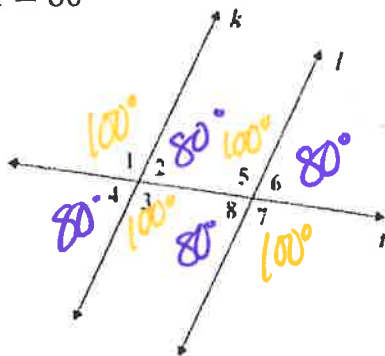
Alternate Interior Angles:

$\angle 3$  and  $\angle 6$        $\angle 4$  and  $\angle 5$

Alternate Exterior Angles:

$\angle 1$  and  $\angle 8$        $\angle 2$  and  $\angle 7$

3.  $m\angle 4 = 80^\circ$



Corresponding Angles:

$\angle 1$  and  $\angle 5$        $\angle 2$  and  $\angle 6$   
 $\angle 3$  and  $\angle 7$        $\angle 4$  and  $\angle 8$

Alternate Interior Angles:

$\angle 2$  and  $\angle 8$        $\angle 3$  and  $\angle 5$

Alternate Exterior Angles:

$\angle 1$  and  $\angle 7$        $\angle 4$  and  $\angle 6$