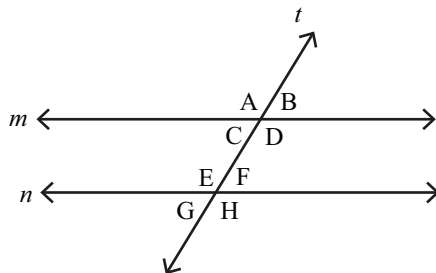


## Handout 2: Versatile Transversals - Answers



- Name all pairs of corresponding angles.  
 $\angle A$  and  $\angle E$ ,  $\angle B$  and  $\angle F$ ,  $\angle C$  and  $\angle G$ ,  
 $\angle D$  and  $\angle H$ .  
 $m\angle C = 23^\circ$
- Name all pairs of alternate interior angles.  
 $\angle C$  and  $\angle F$ ,  $\angle D$  and  $\angle E$
- Name all pairs of alternate exterior angles.  
 $\angle A$  and  $\angle H$ ,  $\angle B$  and  $\angle G$
- If  $m\angle A = 121^\circ$ , what is the measure of  $\angle E$ ?  
 $m\angle E = 121^\circ$
- If  $m\angle C = 76^\circ$ , what is the measure of  $\angle H$ ?  
 $m\angle H = 104^\circ$ .
- If  $m\angle B = 3x + 8$  and  $m\angle F = 5x - 2$ ,  
 what is the measure of  $\angle C$ ?  
 $x = 25, y = 10$
- If  $m\angle A = 4x + 12$ ,  $m\angle C = 7y - 2$ , and  
 $m\angle H = 3x + 4y - 3$ . What are the val-  
 ues of  $x$  and  $y$ ?  
 $x = 25, y = 10$
- The measure of angles  $\angle E$  and  $\angle D$   
 are both  $124^\circ$ . What can we conclude  
 about lines  $m$  and  $n$ ?  
 $m \parallel n$
- The measure of angles  $\angle B$  and  $\angle C$  are  
 both  $60^\circ$ . What can we conclude about  
 lines  $m$  and  $n$ ?  
 Nothing.
- All angles resulting from two parallel  
 lines cut by a transversal are either  
 ..... or ..... to each other.  
 Congruent, supplementary.