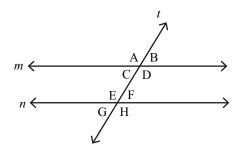
## Handout 2: Versatile Transversals - Answers



- 1. Name all pairs of corresponding angles.  $\angle A$  and  $\angle E$ ,  $\angle B$  and  $\angle F$ ,  $\angle C$  and  $\angle G$ ,  $\angle D$  and  $\angle H$ .
- 2. Name all pairs of alternate interior angles.  $\angle C$  and  $\angle F$ ,  $\angle D$  and  $\angle E$
- 3. Name all pairs of alternate exterior angles.  $\angle A$  and  $\angle H$ ,  $\angle B$  and  $\angle G$
- 4. If  $m \angle A = 121^{\circ}$ , what is the measure of  $\angle E$ ?  $m \angle E = 121^{\circ}$
- 5. If  $m\angle C=76^\circ$ , what is the measure of  $\angle H$ ?  $m\angle H=104^\circ$ .
- 6. If  $m \angle B = 3x + 8$  and  $m \angle F = 5x 2$ , what is the measure of  $\angle C$ ?

- $m \angle C = 23^{\circ}$
- 7. If  $m \angle A = 4x + 12$ ,  $m \angle C = 7y 2$ , and  $m \angle H = 3x + 4y 3$ . What are the values of x and y? x = 25, y = 10
- 8. The measure of angles  $\angle E$  and  $\angle D$  are both 124°. What can we conclude about lines m and n?  $m \parallel n$
- 9. The measure of angles  $\angle B$  and  $\angle C$  are both 60°. What can we conclude about lines m and n?

  Nothing.
- 10. All angles resulting from two parallel lines cut by a transversal are either \_\_\_\_\_ or \_\_\_\_ to each other. Congruent, supplementary.

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