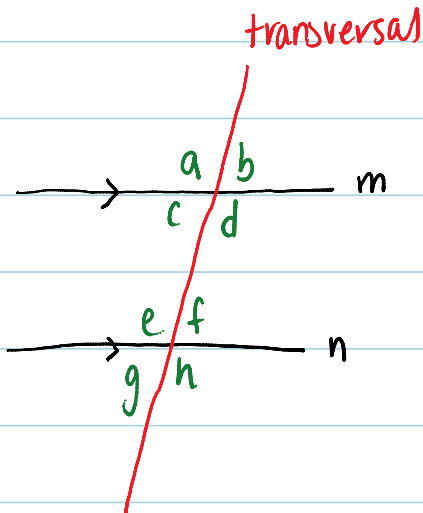


Parallel Lines and Transversals

November-29-13
9:32 AM



If the lines are crossed by **transversal** are parallel, the following are true:

→ interior alternate \angle are =
 $\angle c = \angle f$, $\angle d = \angle e$

→ exterior alternate \angle are =
 $\angle a = \angle g$, $\angle b = \angle h$

→ corresponding \angle are = $\angle b = \angle f$, $\angle a = \angle e$
 $\angle c = \angle g$, $\angle d = \angle h$

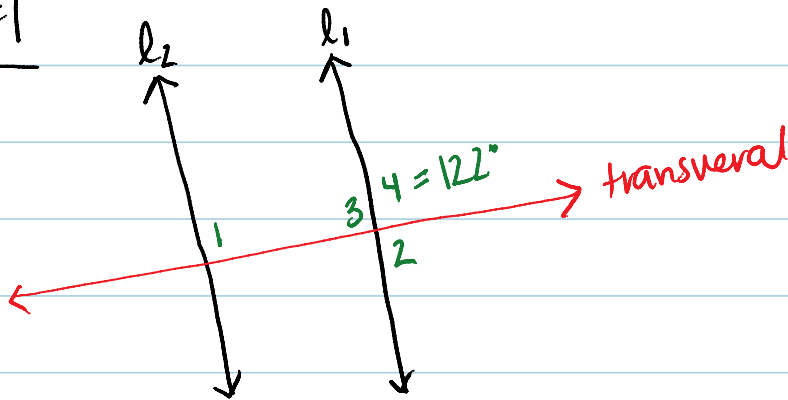
→ interior \angle on the same side of the transversal are supplementary

$$\angle c + \angle e = 180^\circ \quad \angle d + \angle f = 180^\circ$$

→ exterior \angle on the same side of the transversal are supplementary

$$\angle a + \angle g = 180^\circ \quad \angle b + \angle h = 180^\circ$$

Ex. #1



$\angle 1, \angle 2, \angle 3?$

$$\angle 1 = \boxed{122^\circ} \text{ corresponding } \angle \text{ to } \angle 4$$

$$\angle 2 = 180^\circ - 122^\circ = \boxed{58^\circ} \text{ supplementary}$$

$$\angle 3 = \boxed{58^\circ} \text{ vertically opposite to } \angle 2$$