

2. If  $\angle 4 = 118^\circ$ , what is the measure of each of the other angles?

$$m\angle 1 = 62^\circ$$

$$m\angle 5 = 62^\circ$$

$$m\angle 2 = 118^\circ$$

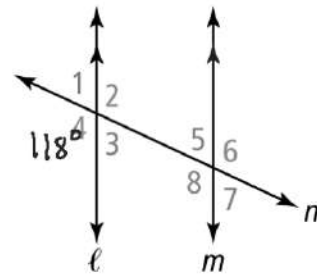
$$m\angle 6 = 118^\circ$$

$$m\angle 3 = 62^\circ$$

$$m\angle 7 = 62^\circ$$

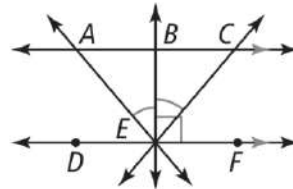
$$m\angle 4 = 118^\circ$$

$$m\angle 8 = 118^\circ$$



**Given:**  $\overline{AC} \parallel \overline{DF}$ ,  $\overline{BE} \perp \overline{DF}$ , and  $\angle AEB \cong \angle CEB$

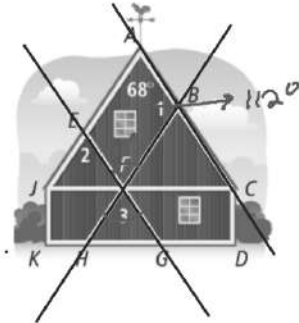
**Prove:**  $\angle BAE \cong \angle BCE$



The white trim shown for the wall of a barn should be constructed so that  $\overline{AC} \parallel \overline{EG}$ ,  $\overline{JA} \parallel \overline{HB}$ , and  $\overline{JC} \parallel \overline{KG}$ . What should  $m\angle 1$  and  $m\angle 3$  be?

$$m\angle 1 = 180 - 68 \\ = 112^\circ$$

$$m\angle 3 = 68^\circ$$



5. If  $m\angle EJF = 56$ , find  $m\angle FHK$ .

$$m\angle FHK = 124$$

