

Name \_\_\_\_\_

Date \_\_\_\_\_

**LESSON 2.5**

**Practice B**

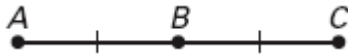
*For use with pages 104–111*

**Complete the logical argument by giving a reason for each step.**

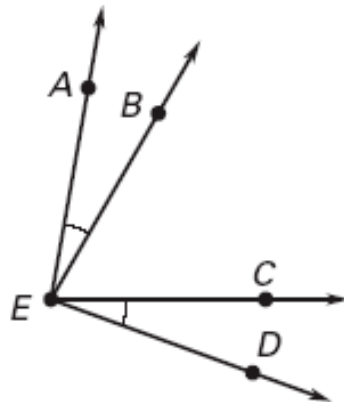
1. $5(2x - 1) = 9x + 2$	Given
$10x - 5 = 9x + 2$	a. <u>  ?</u>
$10x = 9x + 7$	b. <u>  ?</u>
$x = 7$	c. <u>  ?</u>

2. $8x - 5 = -2x - 15$	Given
$10x - 5 = -15$	a. <u>  ?</u>
$10x = -10$	b. <u>  ?</u>
$x = -1$	c. <u>  ?</u>

3. $AB = BC$	Given
$AC = AB + BC$	a. <u>  ?</u>
$AC = AB + AB$	b. <u>  ?</u>
$AC = 2(AB)$	c. <u>  ?</u>



4. $m\angle AEB = m\angle CED$	Given
$m\angle BEC = m\angle BEC$	a. <u>  ?</u>
$m\angle AEB + m\angle BEC = m\angle CED + m\angle BEC$	b. <u>  ?</u>
$m\angle AEC = m\angle AEB + m\angle BEC$	c. <u>  ?</u>
$m\angle BED = m\angle CED + m\angle BEC$	d. <u>  ?</u>
$m\angle AEC = m\angle BED$	e. <u>  ?</u>



5.  $\overleftrightarrow{AB} \perp \overleftrightarrow{EF}, \overleftrightarrow{CD} \perp \overleftrightarrow{EF}$

$m\angle 1 = 90^\circ$

$m\angle 2 = 90^\circ$

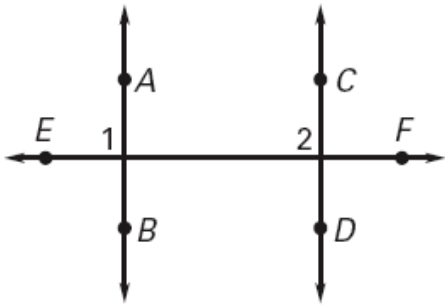
$m\angle 1 = m\angle 2$

Given

a. ?

b. ?

c. ?



Use the property to complete the statement.

6. Reflexive Property of Angle Measure:  $m\angle B = \underline{\quad? \quad}$ .

7. Transitive Property of Equality: If  $CD = GH$  and  $GH = RS$ , then  $\underline{\quad? \quad}$ .

8. Addition Property of Equality: If  $x = 3$ , then  $14 + x = \underline{\quad? \quad}$ .

9. Symmetric Property of Equality: If  $BC = RL$ , then  $\underline{\quad? \quad}$ .

10. Substitution Property of Equality: If  $m\angle A = 45^\circ$ , then  $3(m\angle A) = \underline{\quad? \quad}$ .

11. Multiplication Property of Equality: If  $m\angle A = 45^\circ$ , then  $\underline{\quad? \quad} (m\angle A) = 15^\circ$ .