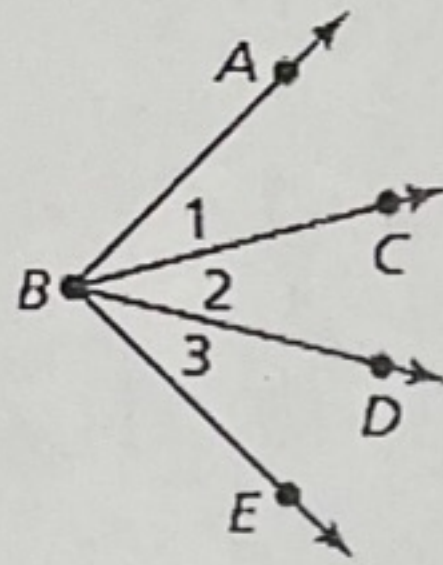


9.4B 19 -25 odd, 26, 51 – 54

9.4B 19-25 impares, 26, 51-54

19. ANALYZING RELATIONSHIPS In the diagram, $m\angle ABD = m\angle CBE$. Show that $m\angle 1 = m\angle 3$. (See Example 1.)

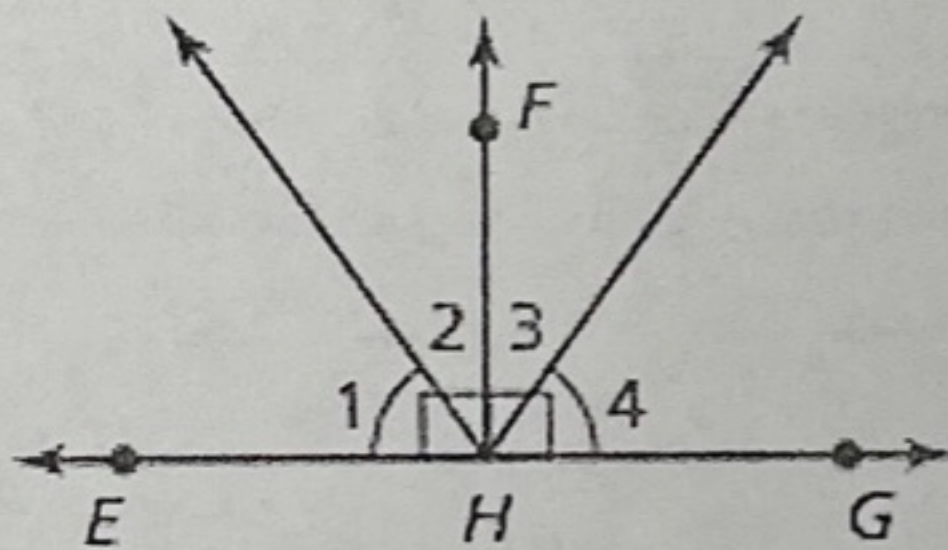
Analisis de Relaciones: En el diagrama $m\angle ABD = m\angle CBE$. Demuestra que $m\angle 1 = m\angle 3$. (Ve el Ejemplo 1.)



| Statements / Declaraciones | Reasons / Razones |
|---|-------------------|
| 1. $m\angle ABD = m\angle CBE$ | 1. |
| 2. $m\angle ABD = m\angle 1 + m\angle 2$ $m\angle CBE = m\angle 2 + m\angle 3$ | 2. |
| 3. $m\angle 1 + m\angle 2 = m\angle 2 + m\angle 3$ | 3. |
| 4. $m\angle 1 = m\angle 3$ | 4. |

21. ANALYZING RELATIONSHIPS Copy and complete the table to show that $m\angle 2 = m\angle 3$.

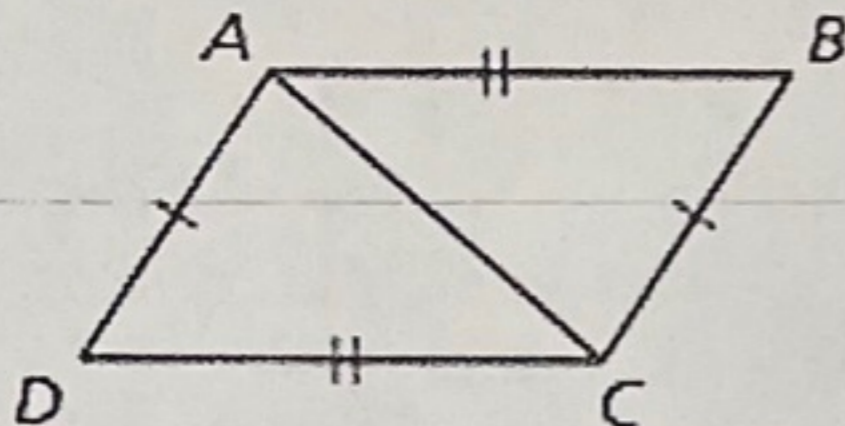
Analisis de Relaciones: Copia y completa la tabla para demostrar que $m\angle 2 = m\angle 3$.



| Equation Ecuación | Reason Razón |
|--|--------------------------------------|
| $m\angle 1 = m\angle 4, m\angle EHF = 90^\circ,$ $m\angle GHF = 90^\circ$ | Given Dado |
| $m\angle EHF = m\angle GHF$ | |
| $m\angle EHF = m\angle 1 + m\angle 2$ $m\angle GHF = m\angle 3 + m\angle 4$ | |
| $m\angle 1 + m\angle 2 = m\angle 3 + m\angle 4$ | |
| | Substitution Property of Equality |
| $m\angle 2 = m\angle 3$ | |

Propiedad de Sustitución
de la Igualdad

23.



Given: $\overline{AB} \cong \overline{CD}$, $\overline{AD} \cong \overline{BC}$

Dado

Prove: $AC + AB + BC = AC + CD + AD$

Demuestra

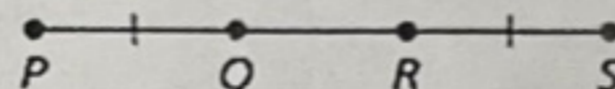
| Statements <i>Declaraciones</i> | Reasons <i>Razones</i> |
|--|------------------------|
| 1. $\overline{AB} \cong \overline{CD}$, $\overline{AD} \cong \overline{BC}$ | 1. |
| 2. $AB = CD$, $AD = BC$ | 2. |
| 3. $AC = AC$ | 3. |
| 4. $AC + AB + BC = AC + AB + BC$ | 4. |
| 5. $AC + AB + BC = AC + CD + AD$ | 5. |

25. Given $PQ = RS$

Dado

Prove $PR = QS$

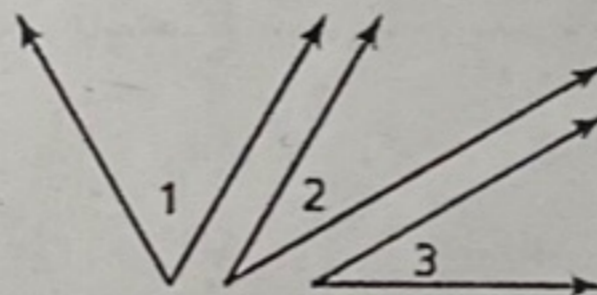
Demuestra



| STATEMENTS <i>DECLARACIONES</i> | REASONS <i>RAZONES</i> |
|---------------------------------|--|
| 1. $PQ = RS$ | 1. _____ |
| 2. $PQ + QR = RS + QR$ | 2. _____ |
| 3. _____ | 3. Segment Addition Postulate <i>Postulado de la suma de segmentos</i> |
| 4. $RS + QR = QS$ | 4. Segment Addition Postulate <i>Postulado de la suma de segmentos</i> |
| 5. $PR = QS$ | 5. _____ |

26. Given $\angle 1$ is a complement of $\angle 2$.
es ángulo complementario de
 $\angle 2 \cong \angle 3$

Prove $\angle 1$ is a complement of $\angle 3$.
es ángulo complementario de



| STATEMENTS <i>DECLARACIONES</i> | REASONS <i>RAZONES</i> |
|---|---|
| 1. $\angle 1$ is a complement of $\angle 2$. <i>es ángulo complementario de</i> | 1. Given <i>Dado</i> |
| 2. $\angle 2 \cong \angle 3$ | 2. _____ |
| 3. $m\angle 1 + m\angle 2 = 90^\circ$ | 3. _____ |
| 4. $m\angle 2 = m\angle 3$ | 4. Definition of congruent angles <i>Definición de ángulos congruentes</i> |
| 5. _____ | 5. Substitution Property of Equality <i>Propiedad de Sustitución de la Igualdad</i> |
| 6. $\angle 1$ is a complement of $\angle 3$. <i>es ángulo complementario de</i> | 6. _____ |

Use your text book to complete #51 – 54. *Usa tu libro de texto para completar números 51-54.*

51.

52.

53.

54.