

LESSON

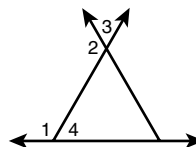
Practice B

2-7 *Flowchart and Paragraph Proofs*

1. Use the given two-column proof to write a flowchart proof.

Given: $\angle 4 \cong \angle 3$

Prove: $m\angle 1 = m\angle 2$

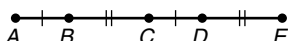


Statements	Reasons
1. $\angle 1$ and $\angle 4$ are supplementary, $\angle 2$ and $\angle 3$ are supplementary.	1. Linear Pair Thm.
2. $\angle 4 \cong \angle 3$	2. Given
3. $\angle 1 \cong \angle 2$	3. \cong Supps. Thm.
4. $m\angle 1 = m\angle 2$	4. Def. of $\cong \angle$

2. Use the given two-column proof to write a paragraph proof.

Given: $AB = CD, BC = DE$

Prove: C is the midpoint of \overline{AE} .



Statements	Reasons
1. $AB = CD, BC = DE$	1. Given
2. $AB + BC = CD + DE$	2. Add. Prop. of =
3. $AB + BC = AC, CD + DE = CE$	3. Seg. Add. Post.
4. $AC = CE$	4. Subst.
5. $\overline{AC} \cong \overline{CE}$	5. Def. of \cong segs.
6. C is the midpoint of \overline{AE} .	6. Def. of mdpt.
