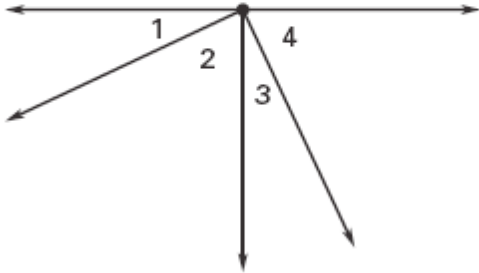


1. Fill in the blanks to complete the two column proof.

Given: $\angle 1$ and $\angle 2$ are complementary.

$$\angle 1 \cong \angle 3, \angle 2 \cong \angle 4$$

Prove: $\angle 3$ and $\angle 4$ are complementary.



Statements

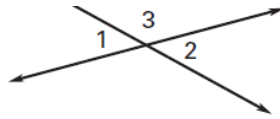
1. $\angle 1$ and $\angle 2$ are complementary.
2. _____
3. $\angle 1 \cong \angle 3, \angle 2 \cong \angle 4$
4. $m\angle 1 = m\angle 3, m\angle 2 = m\angle 4$
5. $m\angle 3 + m\angle 2 = 90^\circ$
6. _____
7. $\angle 3$ and $\angle 4$ are complementary.

Reasons

1. _____
2. Definition of Complementary Angles
3. Given
4. _____
5. _____
6. Substitution Property of Equality
7. _____

2. *Given:* $\angle 1$ and $\angle 3$ are a linear pair.
 $\angle 2$ and $\angle 3$ are a linear pair.

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



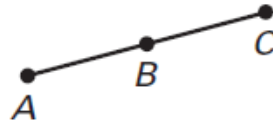
Statements

1. $\angle 1$ and $\angle 3$ are a linear pair.
 $\angle 2$ and $\angle 3$ are a linear pair.
2. $\angle 1$ and $\angle 3$ are supplementary.
 $\angle 2$ and $\angle 3$ are supplementary.
3. $\angle 1 \cong \angle 2$
4. $m\angle 1 = m\angle 2$

Reasons

1. _____
2. _____
3. _____
4. _____

3. *Given:* $AB = BC$
Prove: $\frac{1}{2}AC = BC$



Statements	Reasons
1. $AB = BC$	1. _____
2. $AC = AB + BC$	2. _____
3. $AC = BC + BC$	3. _____
4. $AC = 2BC$	4. _____
5. $\frac{1}{2}AC = BC$	5. _____

4. p. 121, #17

5. p.120, #20