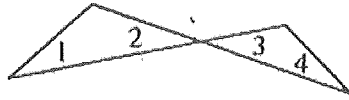


Name: _____ Date: _____ Hour: _____

Angle Proof Homework #1

1. *Given:* $\angle 1 = \angle 2$
 $\angle 3 = \angle 4$
Prove: $\angle 1 = \angle 4$



1. _____

1. Given

2. _____

2. _____

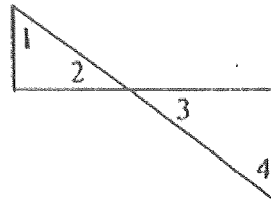
3. _____

3. substitution

4. _____

4. _____

2. *Given:* $\angle 1$ and $\angle 2$ are complements.
 $\angle 3$ and $\angle 4$ are complements.
Prove: $\angle 1 = \angle 4$



1. _____

1. Given

2. _____

2. def of _____

3. _____

3. Substitution

4. _____

4. Vertical angles are _____

5. _____

5. Substitution

6. _____

6. Subtraction

1. **Given:** $\angle 1 = \angle 2$
 $\angle 3 = \angle 4$
Prove: $\angle 1 = \angle 4$

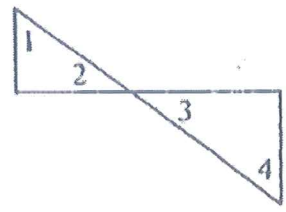


1. $\angle 1 \cong \angle 2$ $\angle 3 \cong \angle 4$
2. $\angle 2 \cong \angle 3$
3. $\angle 1 \cong \angle 3$
4. $\angle 1 \cong \angle 4$

1. Given
2. Vertical \angle s are \cong
3. substitution
4. Substitution

} Steps 3 + 4
 could be
 Put together
 ;)

2. **Given:** $\angle 1$ and $\angle 2$ are complements.
 $\angle 3$ and $\angle 4$ are complements.
Prove: $\angle 1 = \angle 4$



- $\angle 1$ and $\angle 2$ are compl.
 $\angle 3$ and $\angle 4$ are compl.
1. $\angle 1 + \angle 2 = 90$
 2. $\angle 3 + \angle 4 = 90$
 3. $\angle 1 + \angle 2 = \angle 3 + \angle 4$
 4. $\angle 2 \cong \angle 3$
 5. $\angle 1 + \angle 2 = \angle 2 + \angle 4$
 6. $\angle 1 \cong \angle 4$

1. Given
2. def of compl.
3. Substitution
4. Vertical \angle s are \cong
5. Substitution
6. Subtraction