

## 2.8 Angle Proofs ws #1

11/1

Name \_\_\_\_\_

1. Given:  $\angle 1 + \angle 3$  are complementary  
 $\angle 2 + \angle 3$  are complementary

Prove:  $\angle 1 \cong \angle 2$

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 $\angle 2 + \angle 3$  are complementary

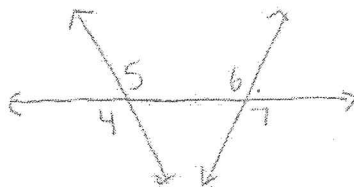
2.  $m\angle 1 + m\angle 3 = 90$       2.  
 $m\angle 2 + m\angle 3 = 90$

3.  $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 3$       3.

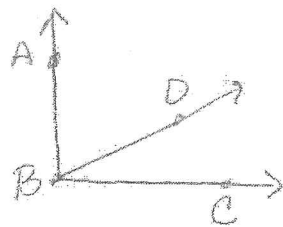
4.  $m\angle 1 = m\angle 2$       4.

5.  $\angle 1 \cong \angle 2$       5.

2. Given:  $\angle 4 \cong \angle 7$   
Prove:  $\angle 5 \cong \angle 6$

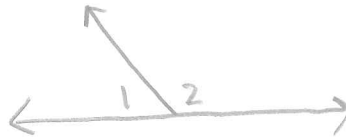


3. Given:  $\angle ABC$  is a right angle  
Prove:  $\angle ABD$  and  $\angle CBD$  are complementary

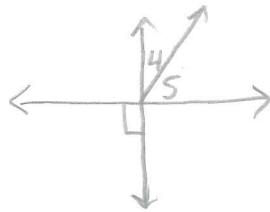


Solve for  $x$  and the missing angle measures.  
State what postulate you used.

4.  $m\angle 1 = x + 10$   
 $m\angle 2 = 3x + 18$



5.  $m\angle 4 = 2x - 5$   
 $m\angle 5 = 4x - 13$



6.  $m\angle 6 = 7x - 24$   
 $m\angle 7 = 5x + 14$

