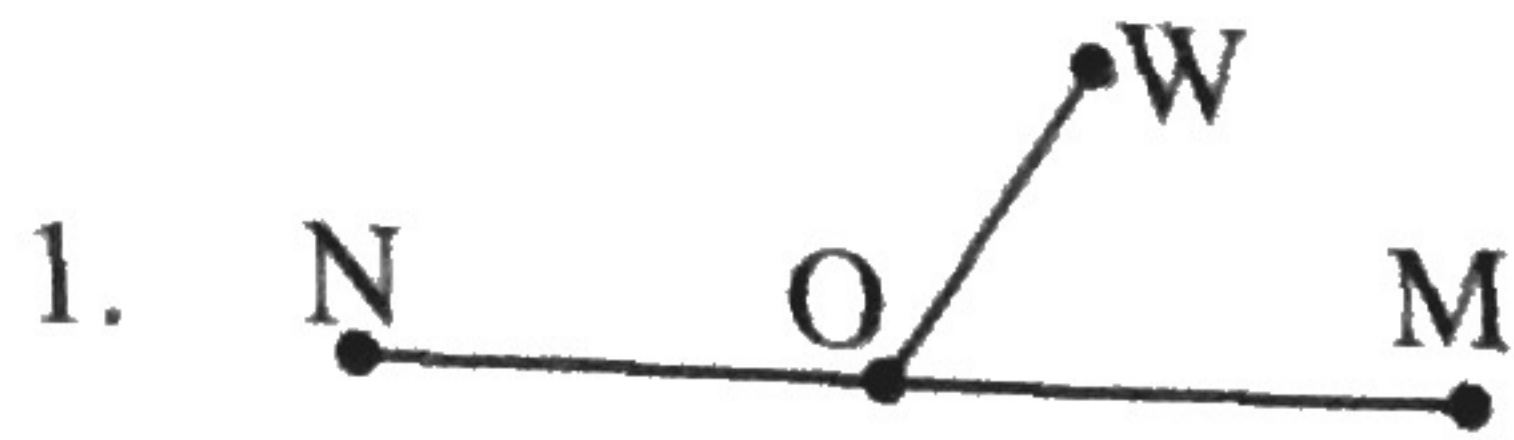
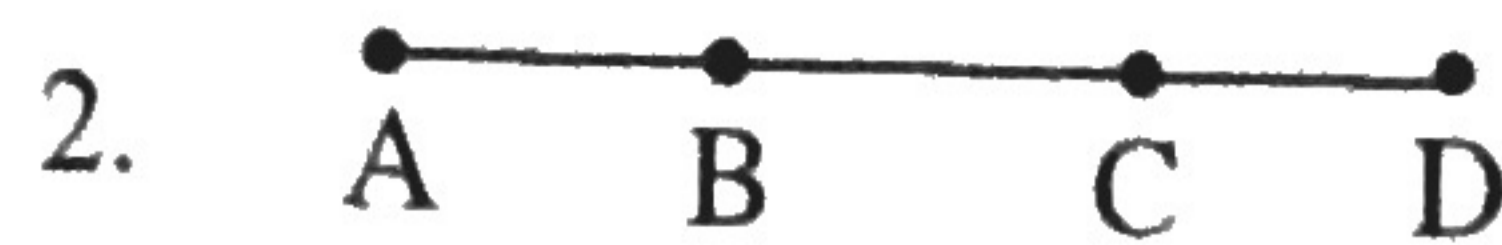


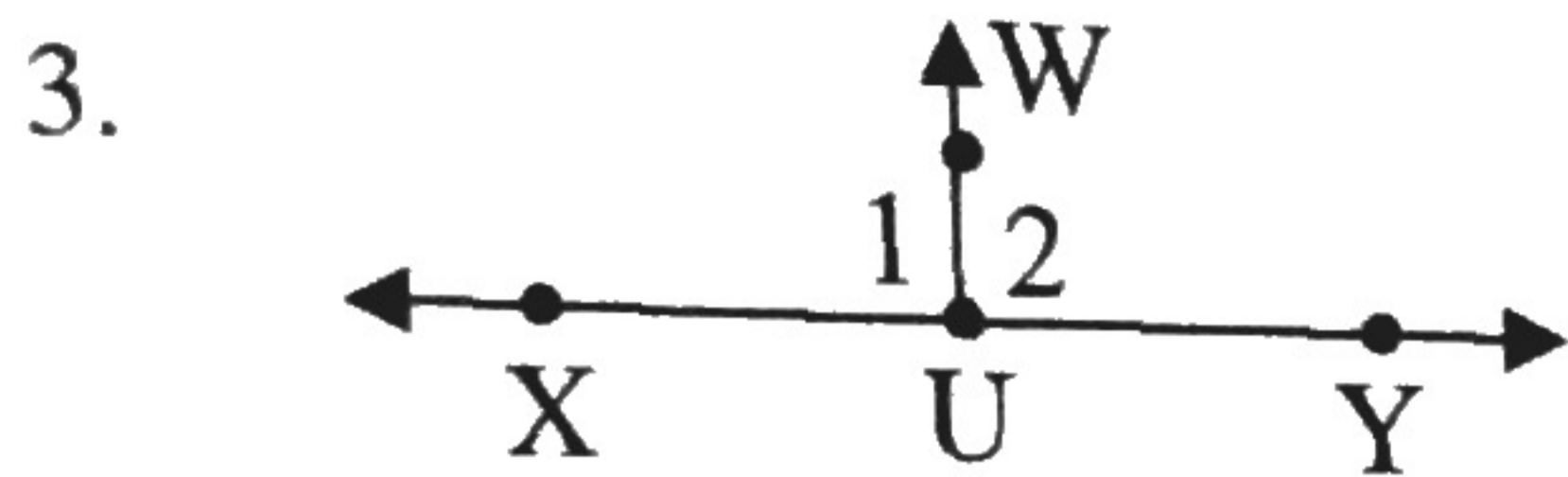
Proofs Worksheet #2



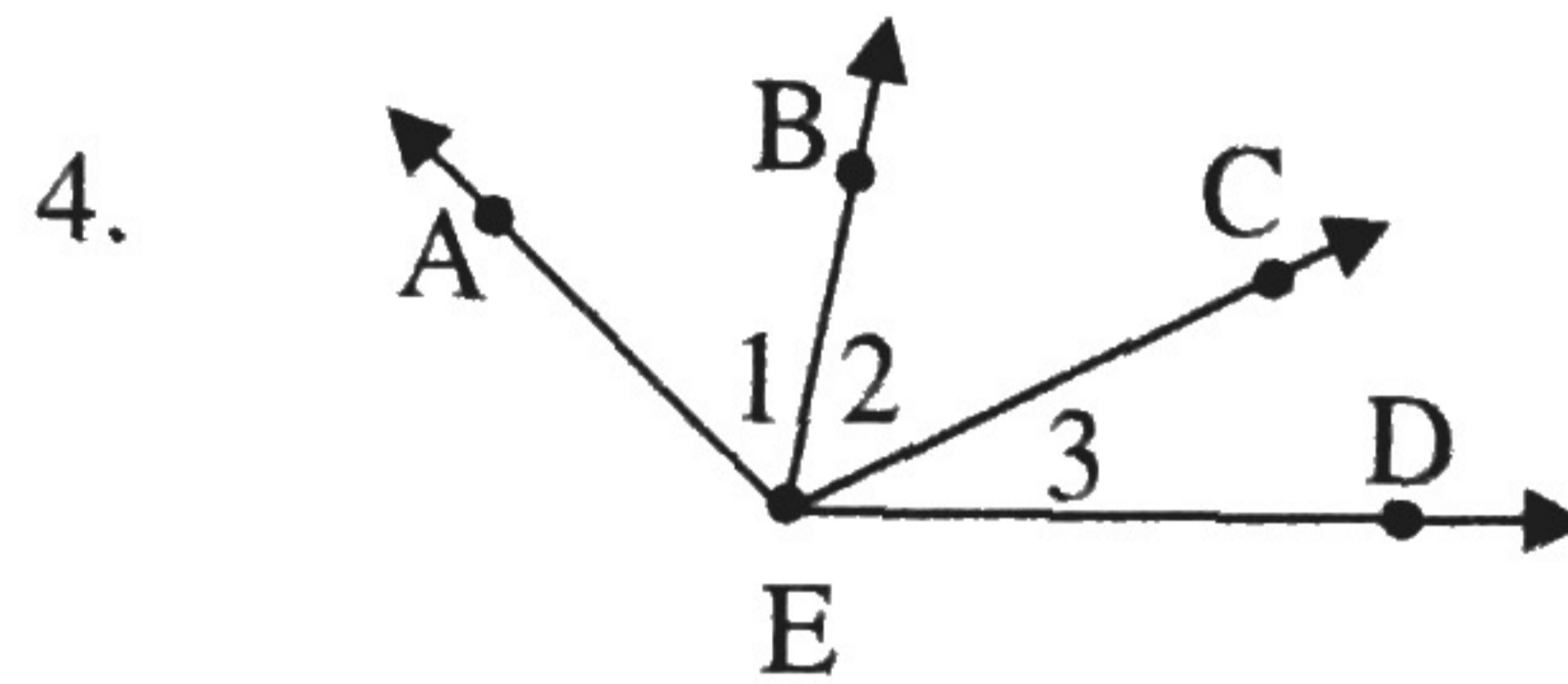
Given: O is the midpoint of  $\overline{MN}$   
 $OM = OW$   
 Prove:  $OW = ON$



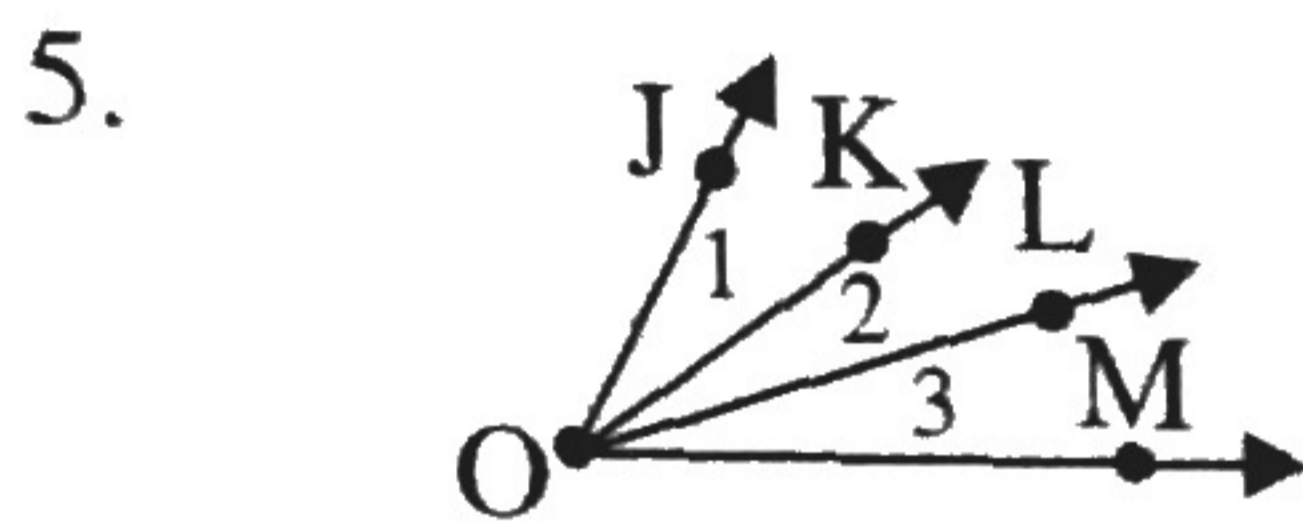
Given:  $AB = CD$   
 Prove:  $AC = BD$



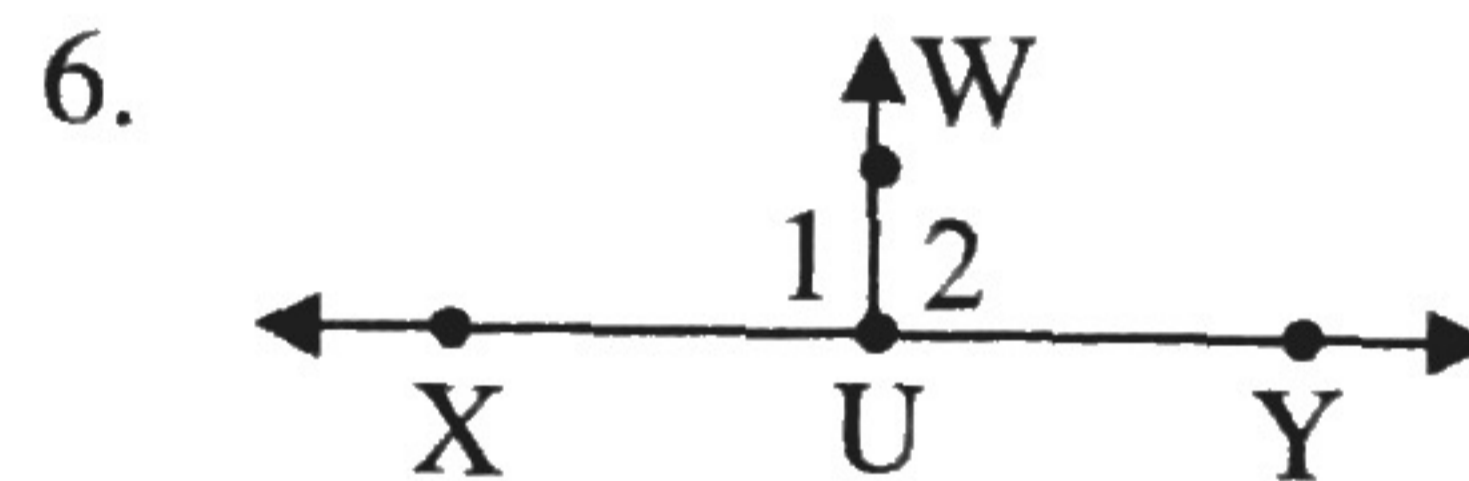
Given:  $m\angle 1 = 90^\circ$   
 Prove:  $m\angle 2 = 90^\circ$



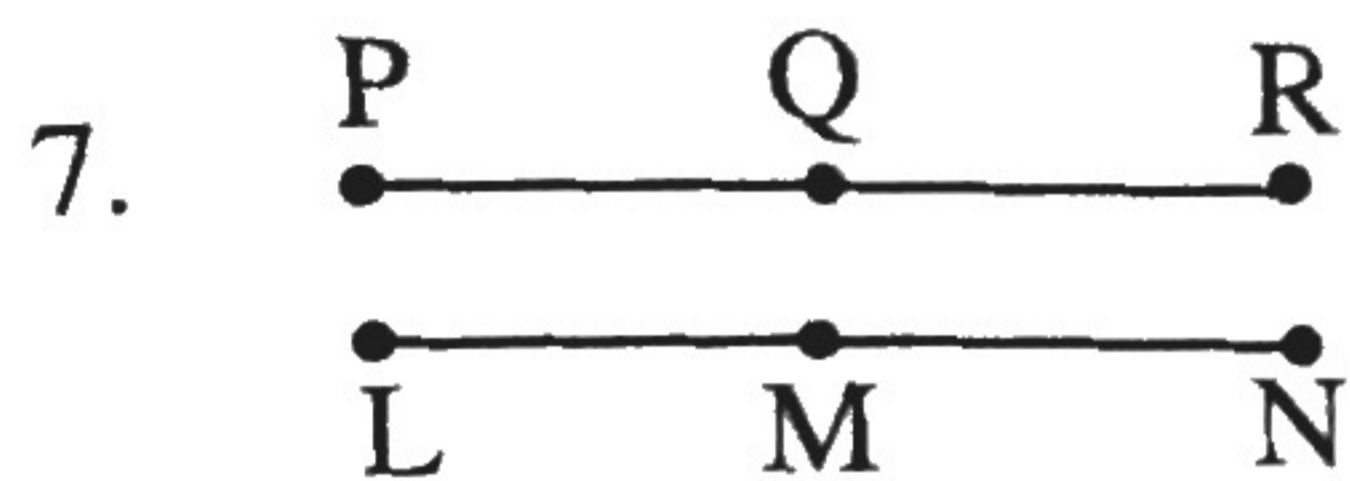
Given:  $\angle 1$  and  $\angle 2$  are complementary  
 $\angle 3$  and  $\angle 2$  are complementary  
 Prove:  $m\angle 1 = m\angle 3$



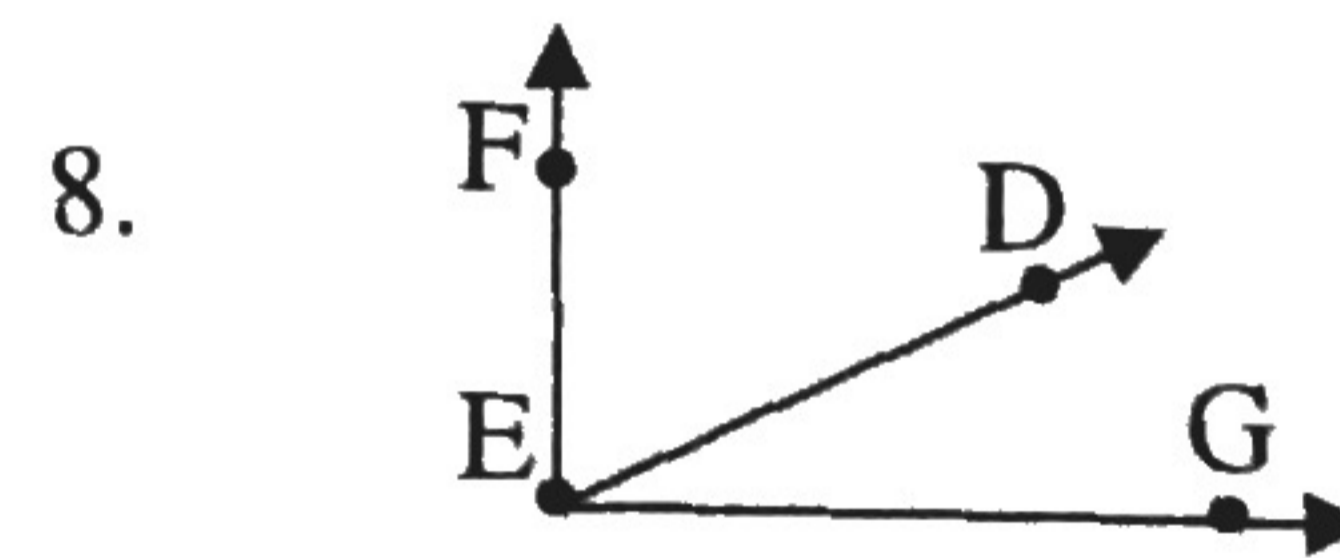
Given:  $m\angle 1 = m\angle 3$   
 Prove:  $m\angle JOL = m\angle KOM$



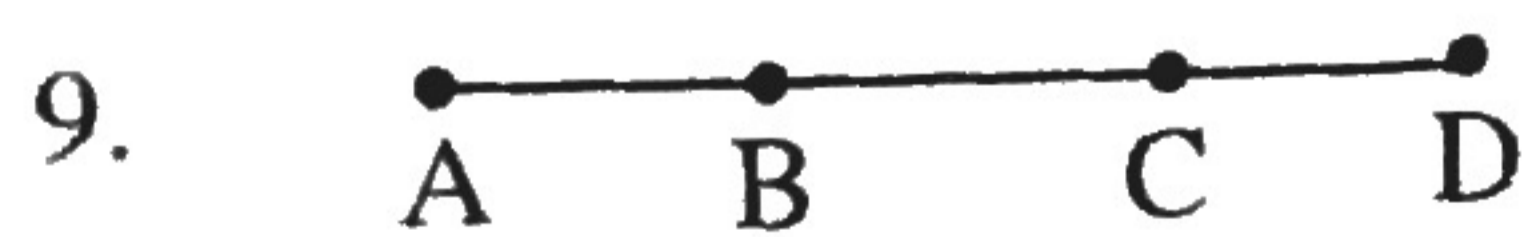
Given:  $m\angle 1 = 90^\circ$   
 Prove:  $m\angle 2 + 90 = 180$



Given:  $\overline{PR} \cong \overline{LN}$   
 Q is the midpoint of  $\overline{PR}$   
 M is the midpoint of  $\overline{LN}$   
 Prove:  $PQ = LM$



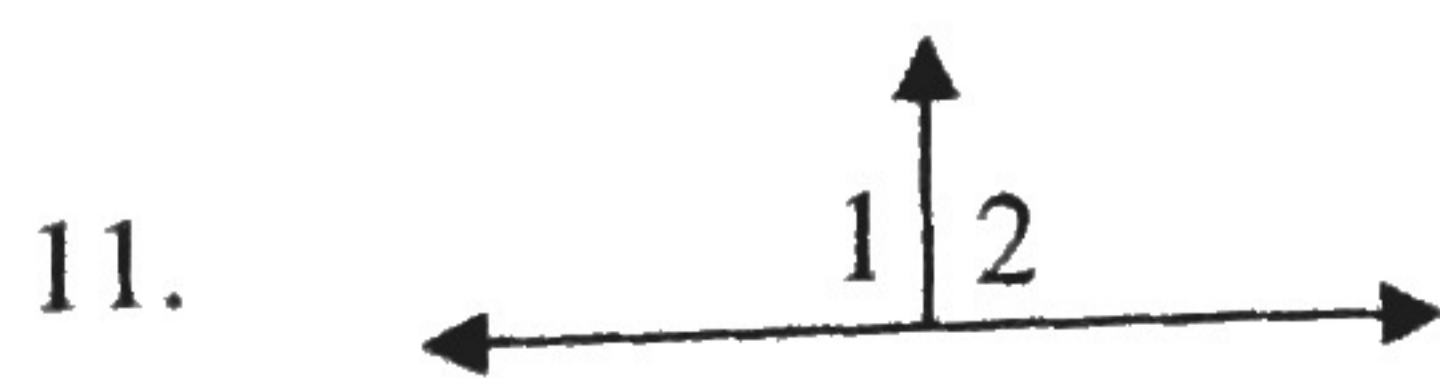
Given:  $\overline{EF} \perp \overline{EG}$   
 D is in the interior of  $\angle FEG$   
 Prove:  $\angle FED$  and  $\angle DEG$  are complementary



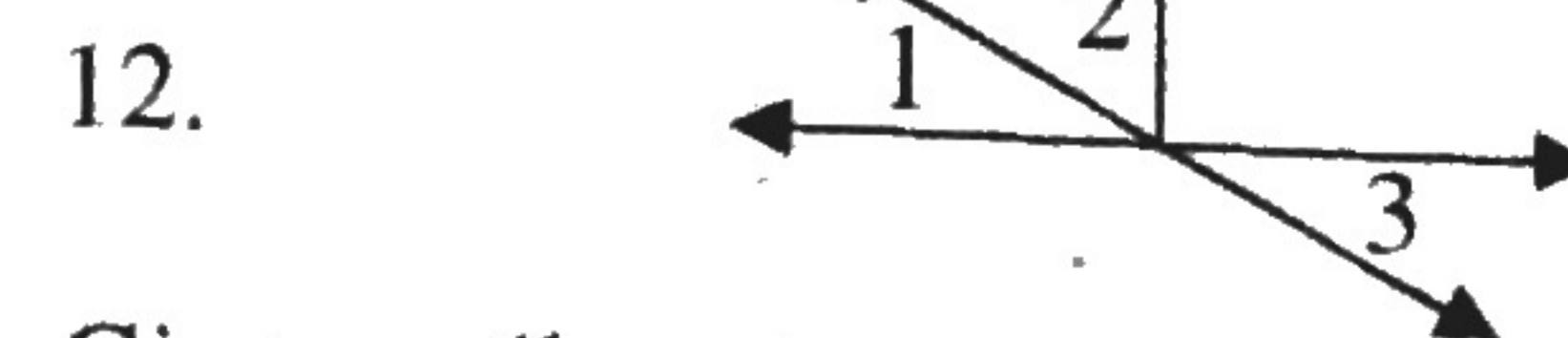
Given:  $\overline{AB} \cong \overline{CD}$   
 Prove:  $\overline{AC} \cong \overline{BD}$



Given:  $\angle 1$  and  $\angle 2$  are supplementary  
 $\angle 1 \cong \angle 2$   
 Prove:  $\angle 1$  and  $\angle 2$  are right angles

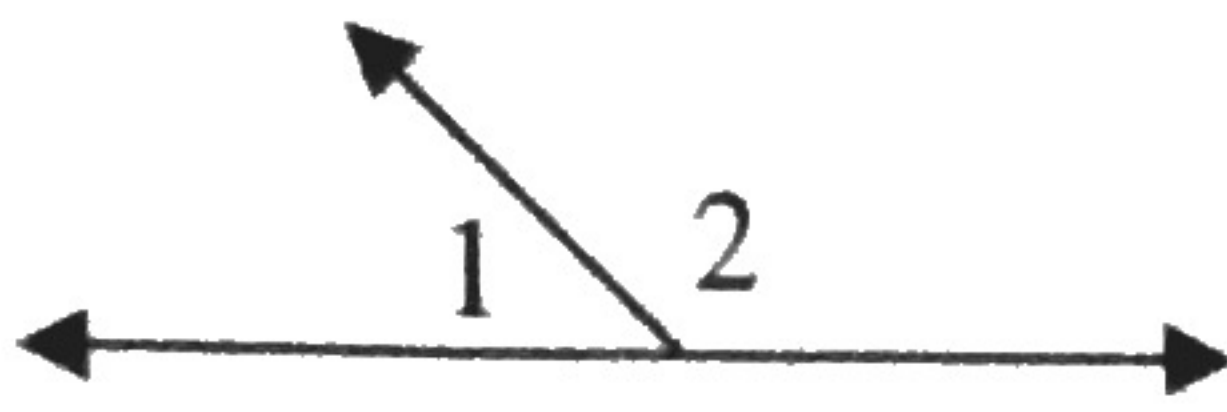


Given:  $\angle 1 \cong \angle 2$   
 Prove:  $\angle 1$  and  $\angle 2$  are right angles



Given:  $\angle 1$  and  $\angle 2$  are complementary  
 Prove:  $\angle 2$  and  $\angle 3$  are complementary

13.



Given:  $m\angle 2 = 2(m\angle 1)$

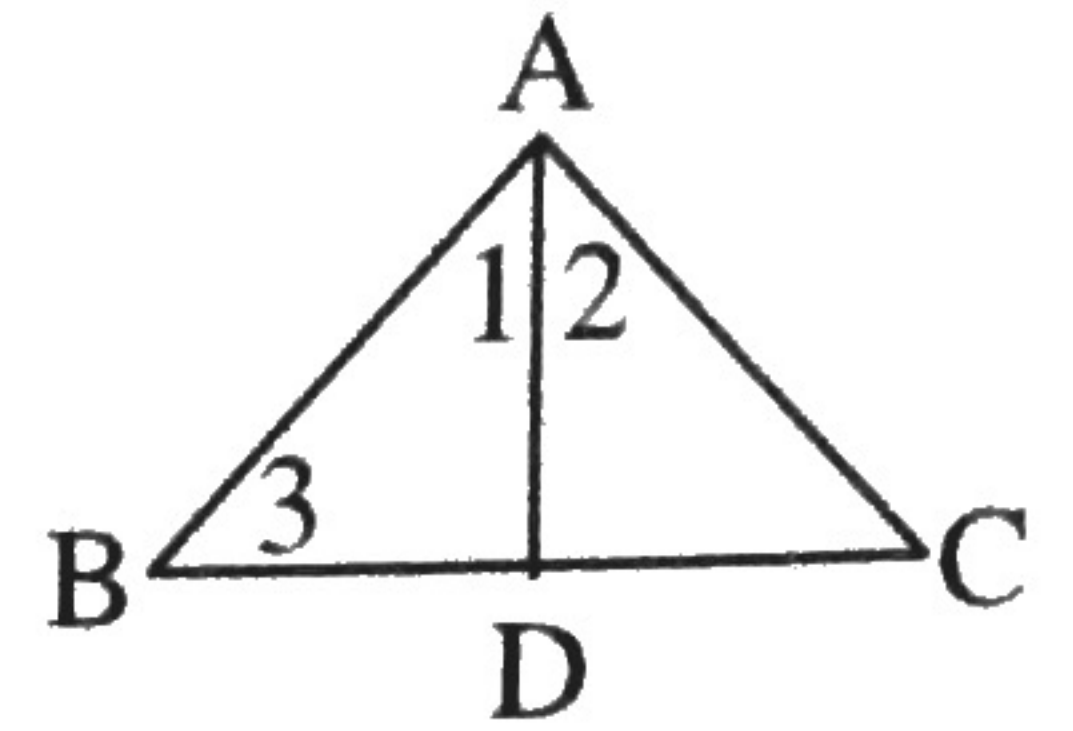
Prove:  $m\angle 1 = 60^\circ$

14.

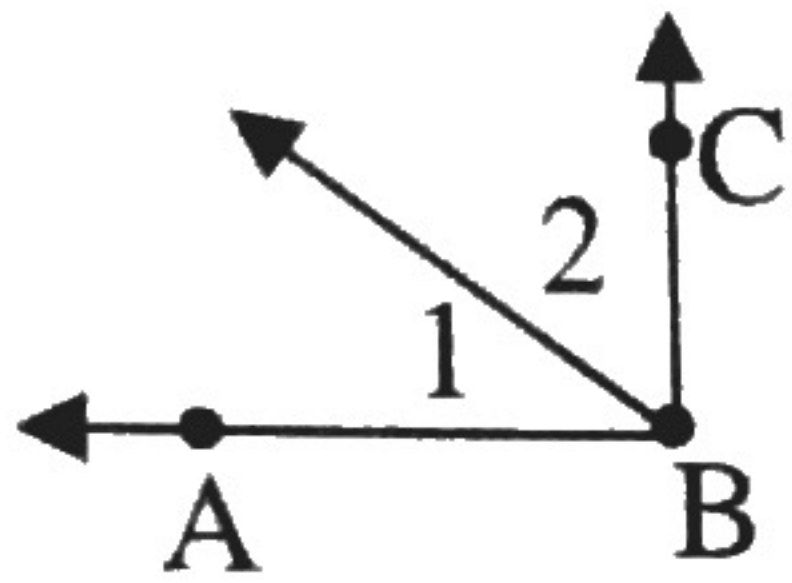
Given:  $\overline{AD}$  bisects  $\angle BAC$

$\angle 1 \cong \angle 3$

Prove:  $\angle 2 \cong \angle 3$



15.



Given:  $\angle ABC$  is a right angle

Prove:  $\angle 1$  and  $\angle 2$  are complementary

16.



Given:  $\overline{CD} \cong \overline{EF}$

$\overline{CD} \cong \overline{FG}$

Prove: F is the midpoint of  $\overline{EG}$

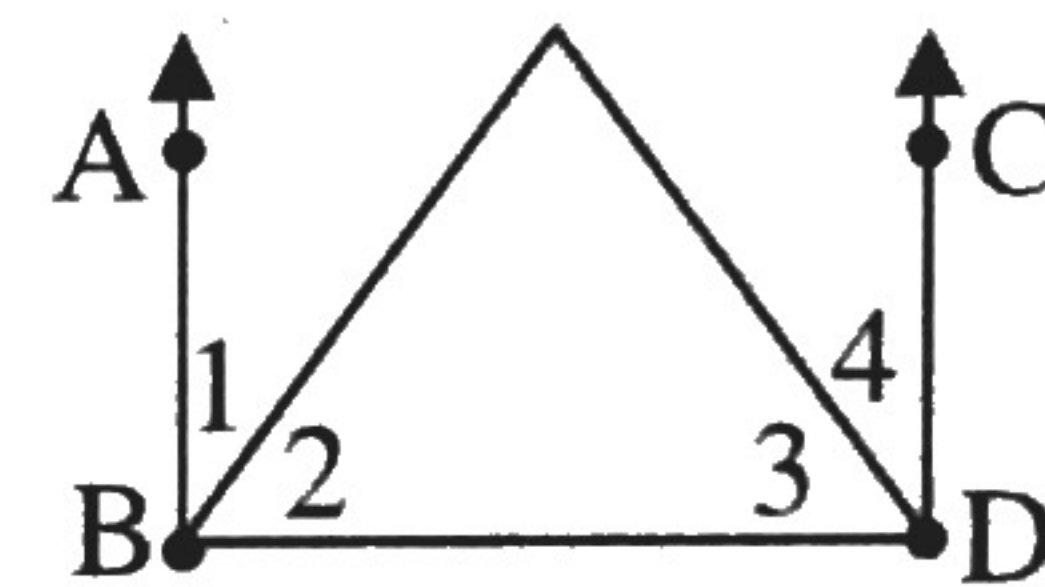
17.



Given:  $KU = HF$

Prove:  $\overline{KH} \cong \overline{UF}$

18.

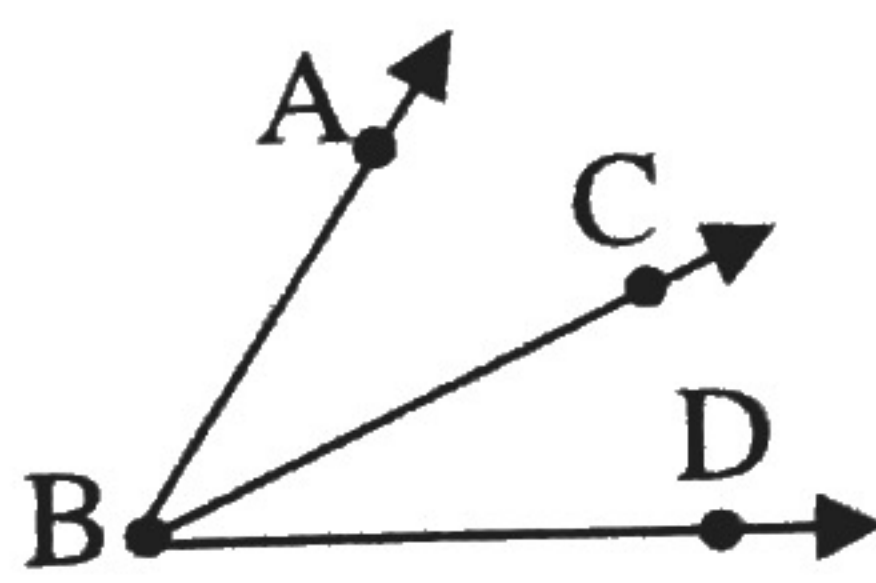


Given:  $\angle ABD$  and  $\angle CDB$  are right angles

$m\angle 2 = m\angle 4$

Prove:  $m\angle 1 = m\angle 3$

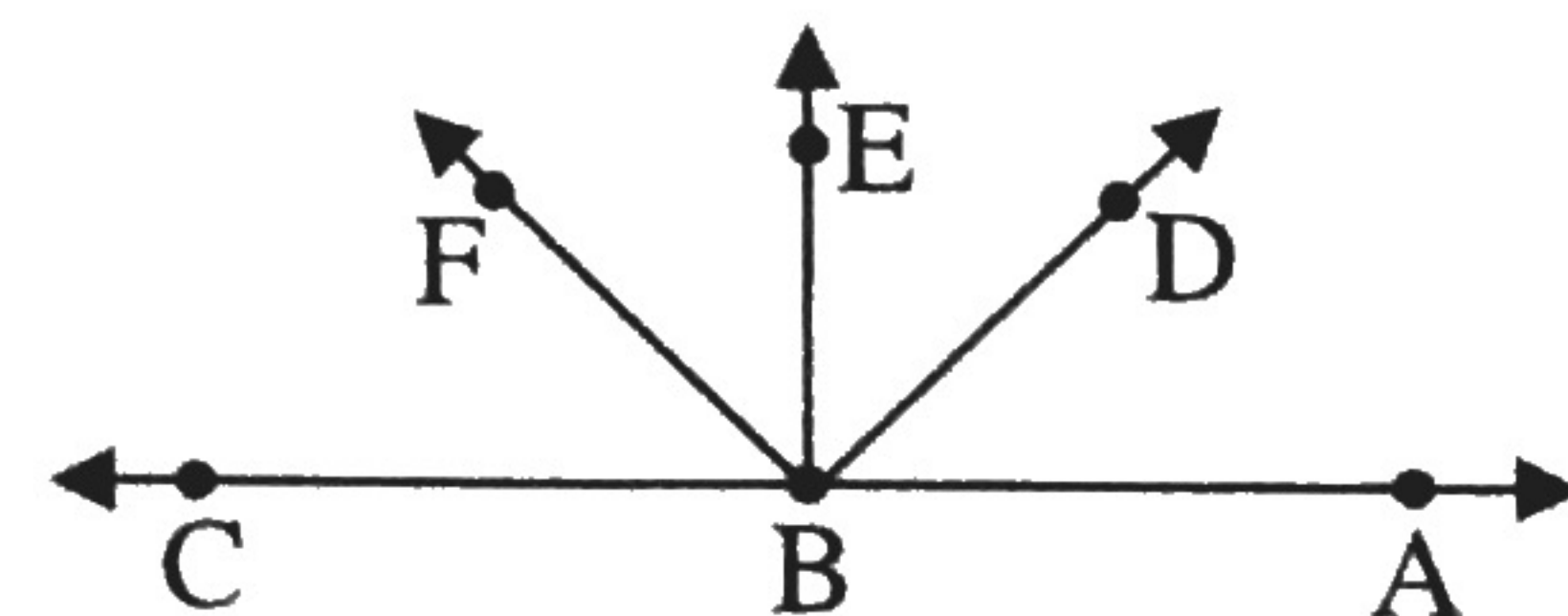
19.



Given:  $m\angle ABC = m\angle CBD$

Prove:  $\overline{BC}$  is the angle bisector of  $\angle ABD$

20.



Given:  $m\angle ABE = m\angle CBE$

Prove:  $\angle ABD$  and  $\angle DBE$  are complementary