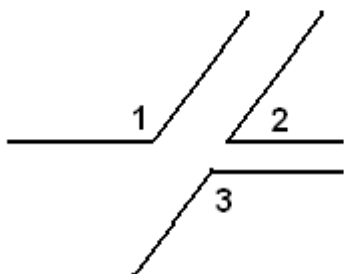


CP Geometry:  
Proof Packet

Name: \_\_\_\_\_

- ① Given:  
 $\angle 1$  is supplementary to  $\angle 2$   
 $\angle 3$  is supplementary to  $\angle 2$

Prove:  
 $\angle 1 \cong \angle 3$

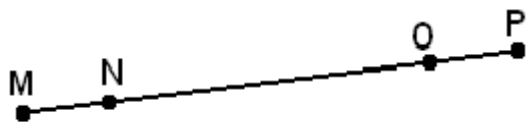


- ② Given:  
 $\angle 1$  and  $\angle 2$  form a linear pair.  
 $m \angle 1 = 35^\circ$

Prove:  
 $m \angle 2 = 145^\circ$

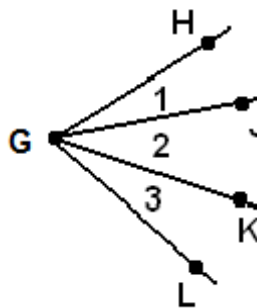
- ③ Given:  $\overline{MN} \cong \overline{OP}$

Prove:  $\overline{MO} \cong \overline{NP}$



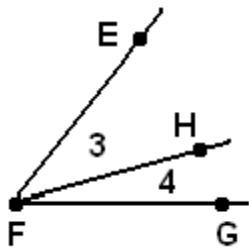
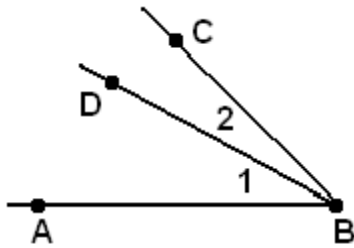
- ④ Given:  $\angle HGK \cong \angle JGL$

Prove:  $\angle 1 \cong \angle 3$

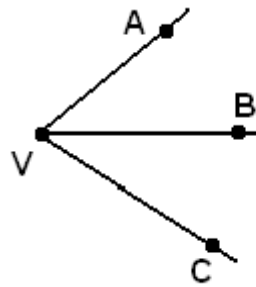


- ⑤ Given:  
 $\angle ABC \cong \angle EFG$   
 $\angle 1 \cong \angle 3$

Prove:  
 $\angle 2 \cong \angle 4$

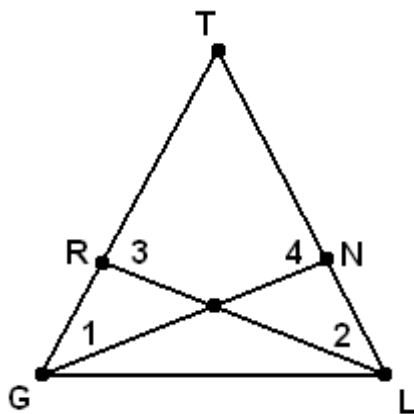


- ⑥ Given:  $\vec{VB}$  bisects  $\angle AVC$   
 Prove:  $2 \cdot m \angle AVB = m \angle AVC$



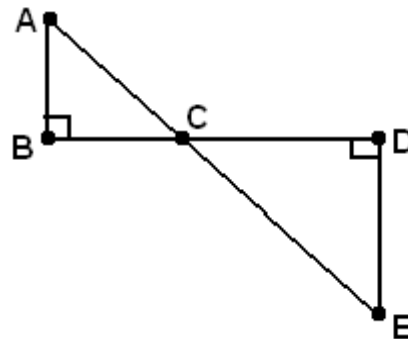
- ⑦ Given:  
 $m \angle 1 = m \angle 2$   
 $m \angle T + m \angle 3 + m \angle 2 = 180^\circ$   
 $m \angle T + m \angle 1 + m \angle 4 = 180^\circ$

Prove:  
 $\angle 3 \cong \angle 4$



- ⑧ Given:  
 $m \angle A + m \angle B + m \angle ACB = 180^\circ$   
 $m \angle D + m \angle E + m \angle DCE = 180^\circ$

Prove:  $\angle A \cong \angle E$



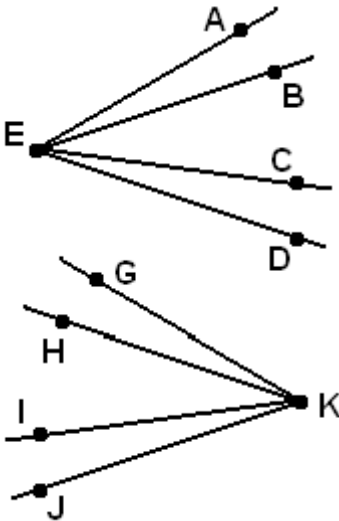
9 Given:

$$\angle AEB \cong \angle GKH$$

$$\angle CED \cong \angle IKJ$$

$$\angle BEC \cong \angle HKI$$

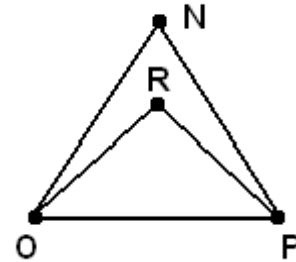
Prove:  $\angle AEC \cong \angle GKI$



10 Given:  $\angle NOP \cong \angle NPO$   
 $\angle ROP \cong \angle RPO$

Prove:

$$\angle NOR \cong \angle NPR$$



11 Given:

$\angle HEF$  is supplementary to  $\angle EHG$

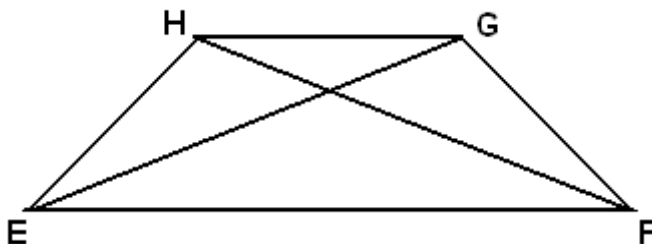
$\angle GFE$  is supplementary to  $\angle FGH$

$$\angle EHF \cong \angle FGE$$

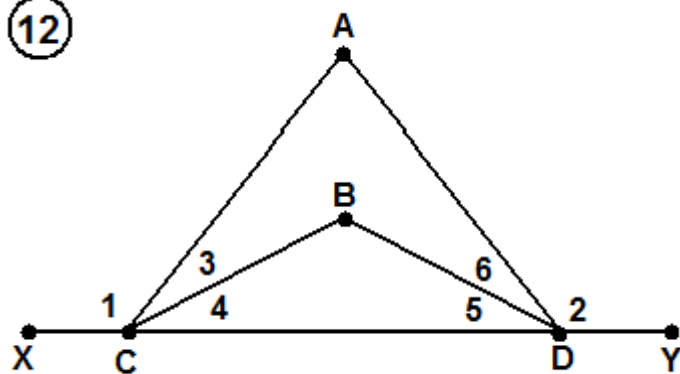
$$\angle GHF \cong \angle HGE$$

Prove:

$$\angle HEF \cong \angle GFE$$



12



Given:

$$\angle 1 \cong \angle 2$$

$\overline{CB}$  bisects  $\angle ACD$

$\overline{DB}$  bisects  $\angle ADC$

Prove:

$$\angle BCX \cong \angle BDY$$