

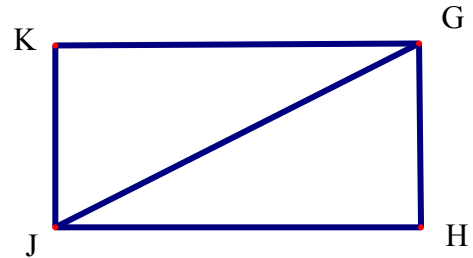
Name: \_\_\_\_\_

Date \_\_\_\_\_

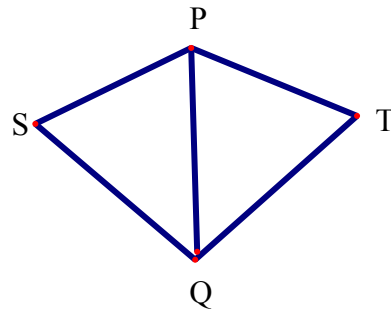
### Proving Congruent Triangles II

Write a proof for each of the following.

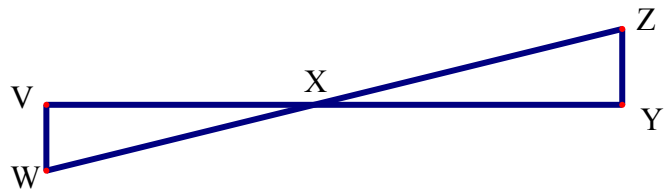
1. Given:  $\overline{GH} \cong \overline{JK}$ ,  $\overline{HJ} \cong \overline{KG}$   
Prove:  $\triangle GHJ \cong \triangle JKG$



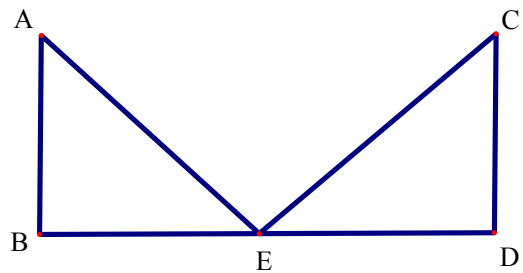
2. Given:  $\overline{PQ}$  bisects  $\angle SPT$   
 $\overline{SP} \cong \overline{TP}$   
Prove:  $\triangle SPQ \cong \triangle TPQ$



3. Given: X is the midpoint  
of  $\overline{WZ}$  and  $\overline{VY}$   
Prove:  $\triangle VWX \cong \triangle YZX$



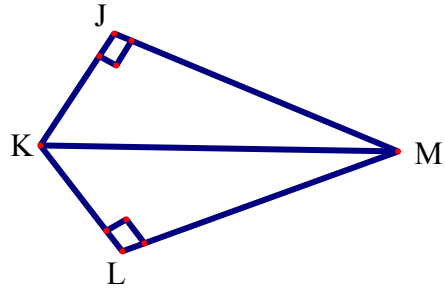
4. Given:  $\overline{AE} \cong \overline{CE}$ ,  $\overline{AB} \cong \overline{CD}$   
E is the midpoint of  $\overline{BD}$   
Prove:  $\triangle EAB \cong \triangle ECD$



5. Given:  $\angle J$  and  $\angle L$  are right angles

$$\overline{JM} \cong \overline{LM}$$

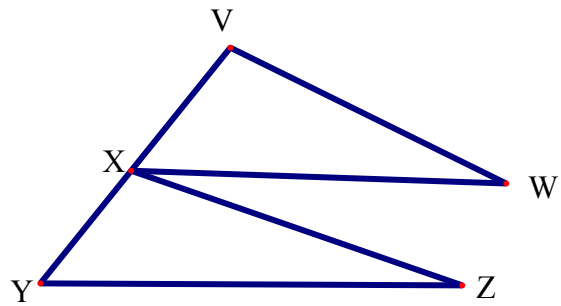
Prove:  $\triangle JKM \cong \triangle LKM$



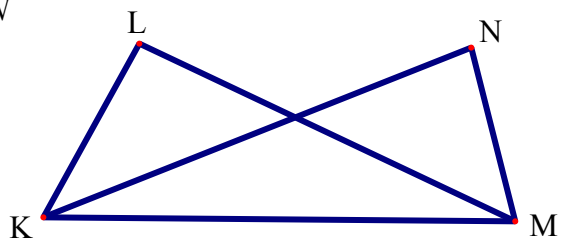
6. Given:  $\overline{VX} \cong \overline{XY}$ ,  $\overline{XW} \cong \overline{YZ}$

$$\overline{XW} \parallel \overline{YZ}$$

Prove:  $\triangle VXW \cong \triangle XYZ$

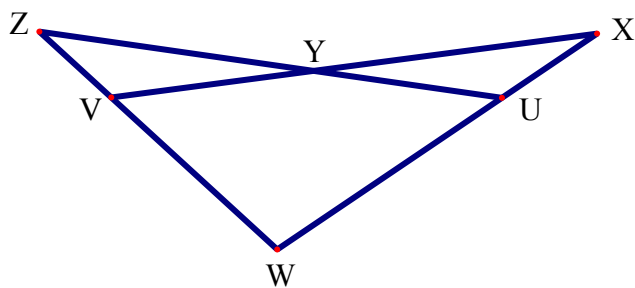


7. Given:  $\angle NKM \cong \angle LMK, \angle L \cong \angle N$   
 Prove:  $\triangle NMK \cong \triangle LKM$

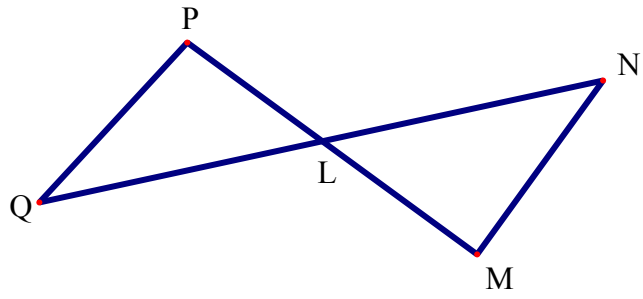


For the following proofs, Use congruent triangles to prove the given statements.

8. Given:  $\overline{VW} \cong \overline{UW}, \angle X \cong \angle Z$   
 Prove:  $\overline{UZ} \cong \overline{VX}$



9. Given:  $\overline{PQ} \cong \overline{MN}$ ,  $\angle P \cong \angle M$   
Prove:  $\overline{QL} \cong \overline{NL}$



10. Given:  $\overline{AB} \cong \overline{AC}$ ,  $\overline{AD}$  bisects  $\overline{BC}$   
Prove:  $\angle BAD \cong \angle CAD$

