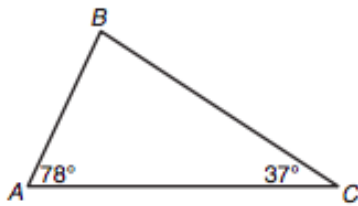


Secondary Math II
 HW 6-3 Proofs of Triangles

Name: _____
 Period: _____

Problems 1-6: Find the missing angle measure.

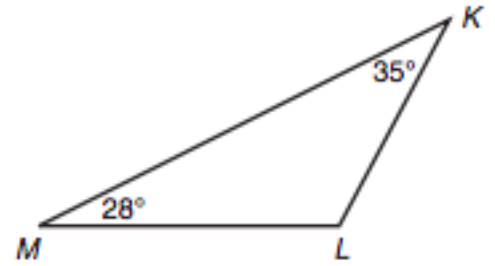
1.



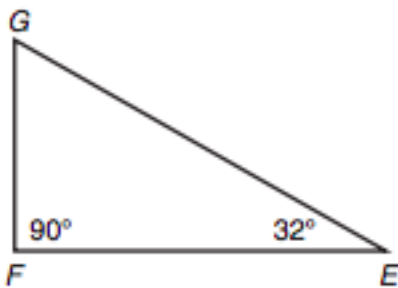
2.



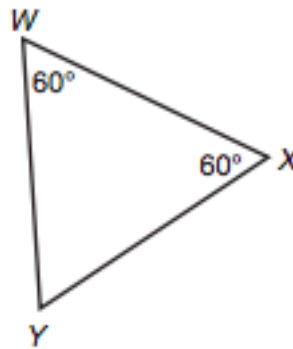
3.



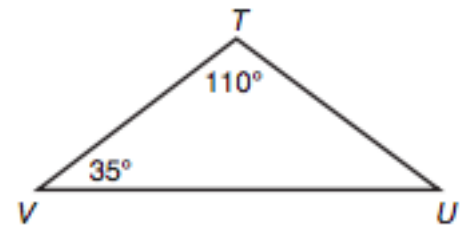
4.



5.

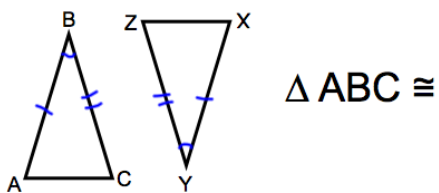


6.

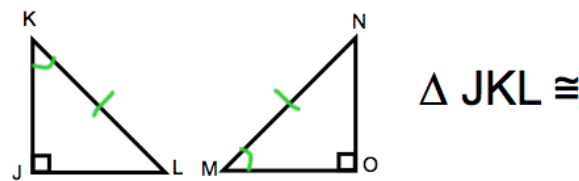


Problems 7-9: What theorem proves these triangles are congruent, then complete the congruency statement:

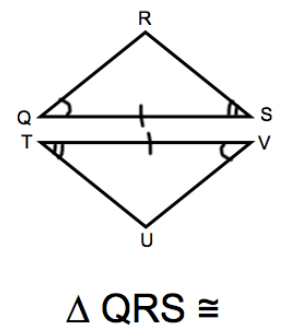
7.



8.



9.

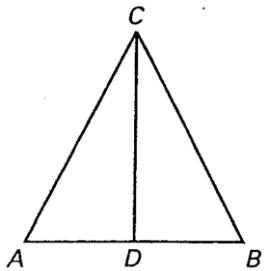


10. Write a two-column proof.

Given: C is on the perpendicular

Bisector of \overline{AB}

Prove: $\triangle ADC \cong \triangle BDC$

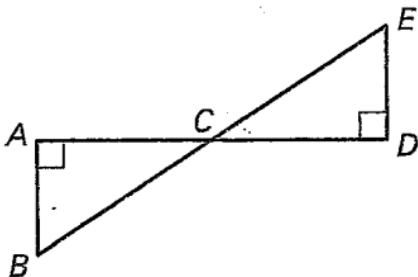


11. Complete a flow-chart

Given: $\overline{AB} \perp \overline{AD}$ and $\overline{AD} \perp \overline{DE}$

C is the midpoint of \overline{BE}

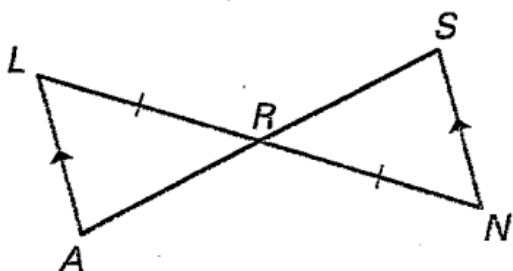
Prove: $\triangle ABC \cong \triangle DEC$



12. Prove using either method:

Given: $\overline{LA} \parallel \overline{SN}$, $\overline{LR} \cong \overline{NR}$

Prove: $\triangle LAR \cong \triangle NSR$



Answer Key (Not all odds):

1. $m\angle B = 65^\circ$
3. $m\angle L = 117^\circ$
5. $m\angle Y = 60^\circ$
7. *SAS*, $\triangle ABC \cong \triangle XYZ$