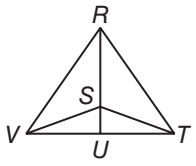
NAME _____ DATE _____ PERIOD _____

4-6 Practice

Isosceles and Equilateral Triangles

Refer to the figure at the right.



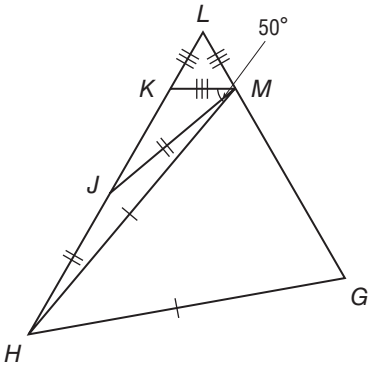
1. If $\overline{RV} \cong \overline{RT}$, name two congruent angles. **$\angle RTV \cong \angle RVT$**

2. If $\overline{RS} \cong \overline{SV}$, name two congruent angles. **$\angle SVR \cong \angle SRV$**

3. If $\angle SRT \cong \angle STR$, name two congruent segments. **$\overline{ST} \cong \overline{SR}$**

4. If $\angle STV \cong \angle SVT$, name two congruent segments. **$\overline{ST} \cong \overline{SV}$**

Find each measure.



5. $m\angle KML$ **60**

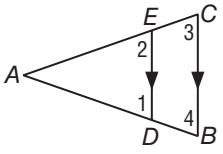
6. $m\angle HMG$ **70**

7. $m\angle GHM$ **40**

8. If $m\angle HJM = 145$, find $m\angle MHJ$. **17.5**

9. If $m\angle G = 67$, find $m\angle GHM$. **46**

10. PROOF Write a two-column proof.



Given: $\overline{DE} \parallel \overline{BC}$
$\angle 1 \cong \angle 2$

Prove: $\overline{AB} \cong \overline{AC}$

Proof:

Statements	Reasons
1. $\overline{DE} \parallel \overline{BC}$	1. Given
2. $\angle 1 \cong \angle 4$ $\angle 2 \cong \angle 3$	2. Corr. $\measuredangle$s are $\cong$.
3. $\angle 1 \cong \angle 2$	3. Given
4. $\angle 3 \cong \angle 4$	4. Congruence of $\measuredangle$s is transitive.
5. $\overline{AB} \cong \overline{AC}$	5. If 2 $\measuredangle$s of a $\triangle$ are $\cong$, then the side opposite those sides are $\cong$

11. SPORTS A pennant for the sports teams at Lincoln High School is in the shape of an isosceles triangle. If the measure of the vertex angle is 18°, find the measure of each base angle.

81, 81