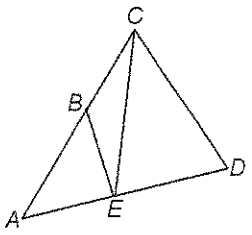
NAME _____ DATE _____ PERIOD _____

4-6 Skills Practice

Isosceles and Equilateral Triangles

Refer to the figure at the right.



1. If $\overline{AC} \cong \overline{AD}$, name two congruent angles.

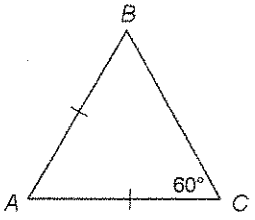
2. If $\overline{BE} \cong \overline{BC}$, name two congruent angles.

3. If $\angle EBA \cong \angle EAB$, name two congruent segments.

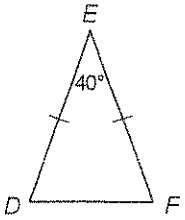
4. If $\angle CED \cong \angle CDE$, name two congruent segments.

Find each measure.

5. $m\angle ABC$

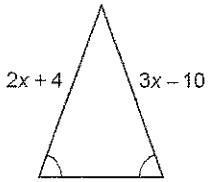


6. $m\angle EDF$

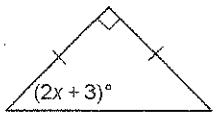


ALGEBRA Find the value of each variable.

7.



8.

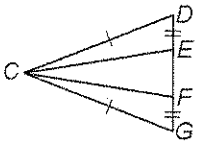


9. **PROOF** Write a two-column proof.

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

$\overline{DE} \cong \overline{GF}$

Prove: $\overline{CE} \cong \overline{CF}$

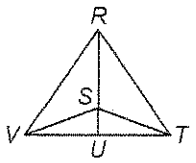


NAME _____ DATE _____ PERIOD _____

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.

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

3. If $\angle SRT \cong \angle STR$, name two congruent segments.

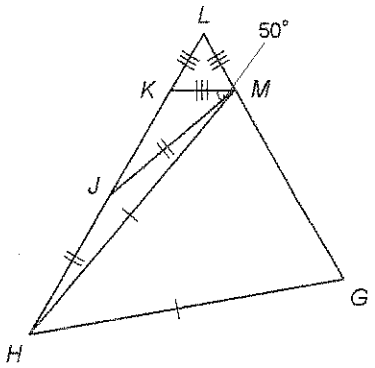
4. If $\angle STV \cong \angle SVT$, name two congruent segments.

Find each measure.

5. $m\angle KML$

6. $m\angle HMG$

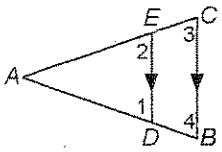
7. $m\angle GHM$



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

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

10. **PROOF** Write a two-column proof.



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

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

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.