

# 4-2 Practice

Form G

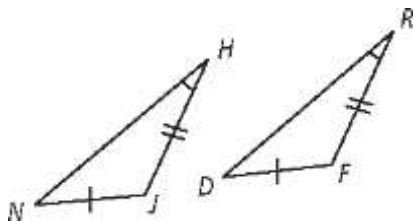
## Triangle Congruence by SSS and SAS

Draw  $\triangle MGT$ . Use the triangle to answer the questions below.

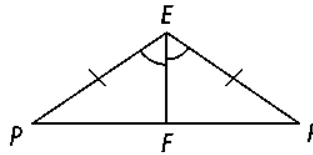
1. What angle is included between  $\overline{GM}$  and  $\overline{MT}$  ?
2. Which sides include  $\angle T$  ?
3. What angle is included between  $\overline{GT}$  and  $\overline{MG}$  ?

Would you use SSS or SAS to prove the triangles congruent? If there is not enough information to prove the triangles congruent by SSS or SAS, write *not enough information*. Explain your answer.

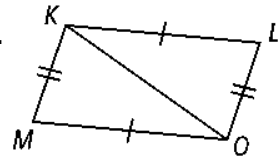
4.



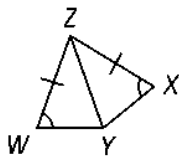
5.



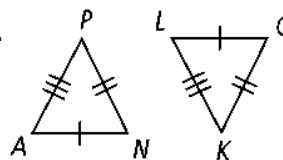
6.



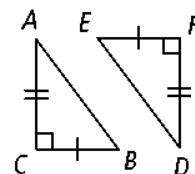
7.



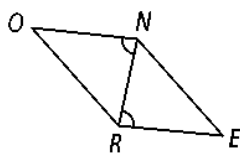
8.



9.



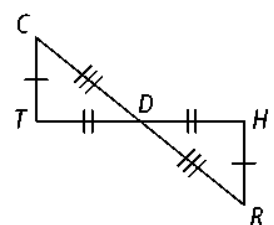
10.



11.



12.



# 4-2

## Practice (continued)

Form G

### Triangle Congruence by SSS and SAS

- 13. Draw a Diagram** A student draws  $\triangle ABC$  and  $\triangle QRS$ . The following sides and angles are congruent:

$$\overline{AC} \cong \overline{QS}$$

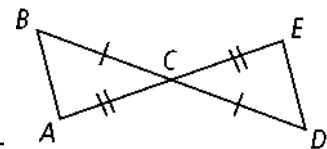
$$\overline{AB} \cong \overline{QR}$$

$$\angle B \cong \angle R$$

Based on this, can the student use either SSS or SAS to prove that  $\triangle ABC \cong \triangle QRS$ ? If the answer is no, explain what additional information the student needs. Use a sketch to help explain your answer.

- 14. Given:**  $\overline{BC} \cong \overline{DC}, \overline{AC} \cong \overline{EC}$

**Prove:**  $\triangle ABC \cong \triangle EDC$



Statements

Reasons

- 15. Given:**  $\overline{WX} \parallel \overline{YZ}, \overline{WX} \cong \overline{YZ}$

**Prove:**  $\triangle WXZ \cong \triangle YZX$

