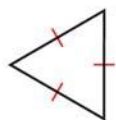


# 4

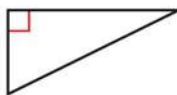
# CHAPTER TEST

Classify the triangle by its sides and by its angles.

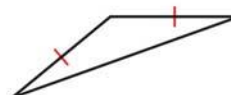
1.



2.



3.



In Exercises 4–6, find the value of  $x$ .

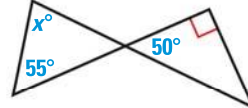
4.



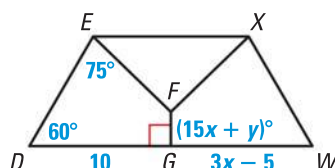
5.



6.

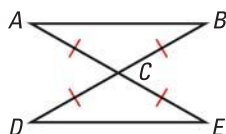


7. In the diagram,  $DEFG \cong WXFG$ .  
Find the values of  $x$  and  $y$ .

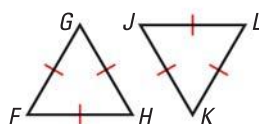


In Exercises 8–10, decide whether the triangles can be proven congruent by the given postulate.

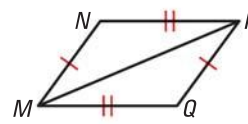
8.  $\triangle ABC \cong \triangle EDC$  by SAS



9.  $\triangle FGH \cong \triangle JKL$  by ASA



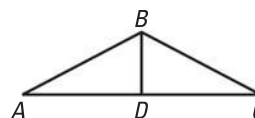
10.  $\triangle MNP \cong \triangle PQM$  by SSS



11. Write a proof.

**GIVEN**  $\triangle ABC$  is isosceles,  $\overline{BD}$  bisects  $\angle B$ .

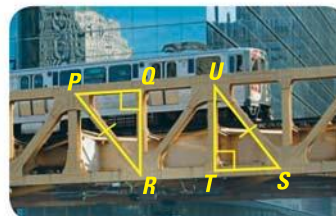
**PROVE**  $\triangle ABD \cong \triangle CBD$



12. What is the third congruence needed to prove that  $\triangle PQR \cong \triangle STU$  using the indicated theorem?

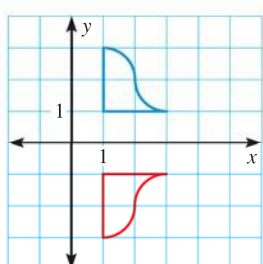
a. HL

b. AAS

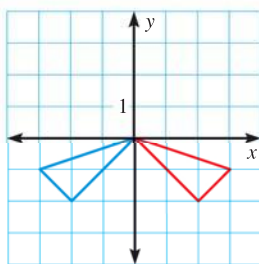


Decide whether the transformation is a *translation*, *reflection*, or *rotation*.

13.



14.



15.

