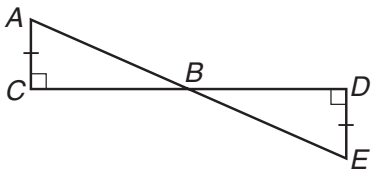


**SKILL**  
**33** **Skills Readiness**  
**Congruent Figures**

Definition: Two triangles are congruent if corresponding sides are congruent and corresponding angles are congruent.

Triangle Congruence Theorems and Postulates				
SSS	SAS	ASA	AAS	HL
all three sides	two sides and the included angle	two angles and the included side	two angles and a nonincluded side	hypotenuse and leg (right triangles)

Example: Determine whether  $\triangle ABC$  and  $\triangle EBD$  are congruent. If they are, explain why.

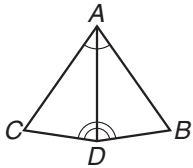


Answer: Yes, they are congruent by AAS.  
 $\angle ACB \cong \angle EDB$  because they are both right angles.  
 $\angle ABC \cong \angle EBD$  because they are vertical angles.  
 The markings on the triangles indicate that side  $AC$  is congruent to side  $DE$ .

**Practice on Your Own**

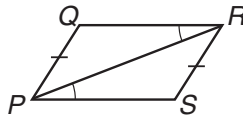
Determine whether the given triangles are congruent. If they are, explain why.

1.  $\triangle ABD$  and  $\triangle ACD$



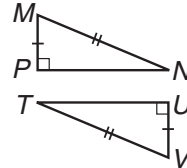
\_\_\_\_\_

2.  $\triangle PQR$  and  $\triangle RSP$



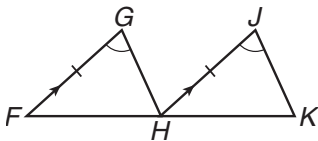
\_\_\_\_\_

3.  $\triangle MNP$  and  $\triangle VTU$



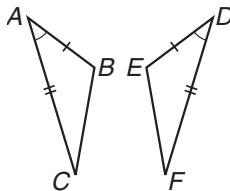
\_\_\_\_\_

4.  $\triangle FGH$  and  $\triangle HJK$



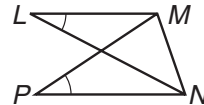
\_\_\_\_\_

5.  $\triangle ABC$  and  $\triangle DEF$



\_\_\_\_\_

6.  $\triangle LMN$  and  $\triangle PNM$

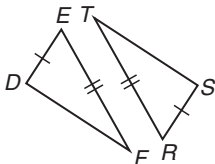


\_\_\_\_\_

**Check**

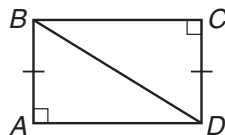
Determine whether the given triangles are congruent. If they are, explain why.

7.  $\triangle DEF$  and  $\triangle SRT$



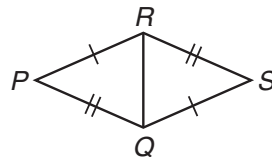
\_\_\_\_\_

8.  $\triangle ABD$  and  $\triangle CDB$



\_\_\_\_\_

9.  $\triangle PRQ$  and  $\triangle SQR$



\_\_\_\_\_