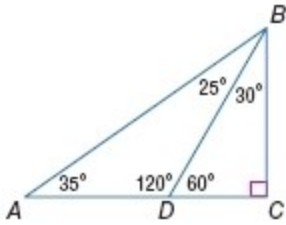


**Study Guide and Review**

**Classify each triangle as acute, equiangular, obtuse, or right.**



11.  $\triangle ADB$

**ANSWER:**

obtuse

12.  $\triangle BCD$

**ANSWER:**

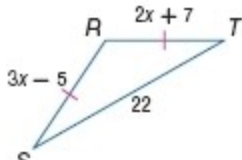
right

13.  $\triangle ABC$

**ANSWER:**

right

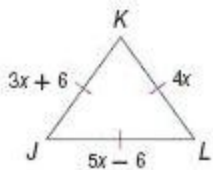
**ALGEBRA Find  $x$  and the measures of the unknown sides of each triangle.**



14.

**ANSWER:**

$x = 12, RS = RT = 31$



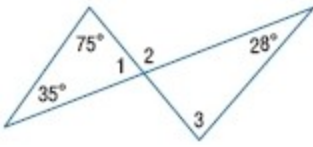
15.

**ANSWER:**

$x = 6, JK = KL = JL = 24$

**Study Guide and Review**

**Find the measure of each numbered angle.**



17.  $\angle 1$

**ANSWER:**

70

18.  $\angle 2$

**ANSWER:**

110

19.  $\angle 3$

**ANSWER:**

82

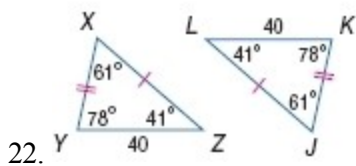
20. **HOUSES** The roof support on Lamar's house is in the shape of an isosceles triangle with base angles of  $38^\circ$ . Find  $x$ .



**ANSWER:**

104

**Show that the polygons are congruent by identifying all congruent corresponding parts. Then write a congruence statement.**

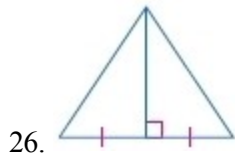


**ANSWER:**

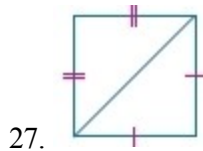
$\angle X \cong \angle J, \angle Y \cong \angle K, \angle Z \cong \angle L, \overline{XY} \cong \overline{JK}, \overline{YZ} \cong \overline{KL}, \overline{XZ} \cong \overline{JL}; \triangle XYZ \cong \triangle JKL$

## Study Guide and Review

Determine which postulate can be used to prove that the triangles are congruent. If it is not possible to prove that they are congruent, write *not possible*.

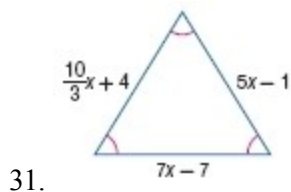


ANSWER:  
SAS

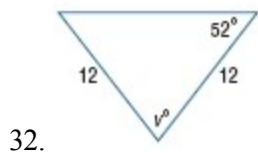


ANSWER:  
not possible

Find the value of each variable.



ANSWER:  
3



ANSWER:  
76

33. **PAINTING** Pam is painting using a wooden easel. The support bar on the easel forms an isosceles triangle with the two front supports. According to the figure below, what are the measures of the base angles of the triangle?



ANSWER:  
77.5