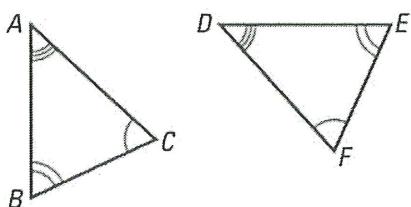


1.  $\triangle ABC \cong \triangle DEF$ .

Identify all pairs of congruent corresponding parts.

$$\begin{array}{l} \angle A \cong \angle D \\ \angle B \cong \angle E \\ \angle C \cong \angle F \end{array} \quad \begin{array}{l} \overline{AB} \cong \overline{DE} \\ \overline{BC} \cong \overline{EF} \\ \overline{CA} \cong \overline{FD} \end{array}$$

Write another valid congruence statement for the figure.

$$\triangle BCA \cong \triangle EFD$$

In the diagram,  $\triangle XYZ \cong \triangle MNL$ . Complete the statement.

2.  $m\angle Y = 124^\circ$

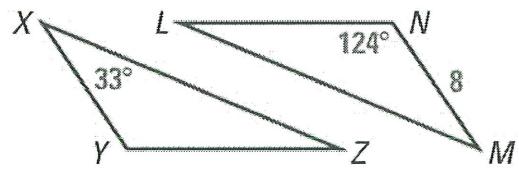
3.  $m\angle M = 33^\circ$

4.  $YX = 8$  units

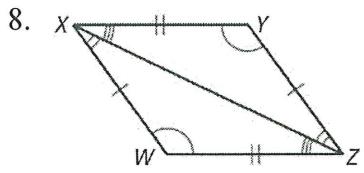
5.  $\overline{YZ} \cong \overline{NL}$

6.  $\triangle LNM \cong \triangle ZYX$

7.  $\triangle YXZ \cong \triangle NML$

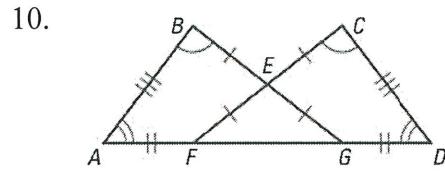
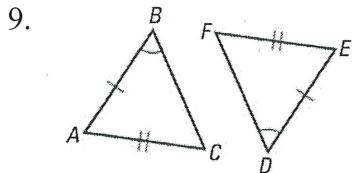


Write a congruence statement for any figures that can be proved congruent. Explain your reasoning.

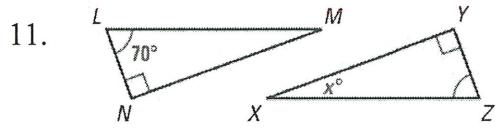


$$\underline{\underline{\triangle WXYZ \cong \triangle YZX}}$$

Not Enough Info.

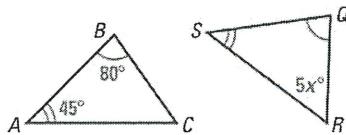


$$\underline{\underline{\triangle BAG \cong \triangle CDF}}$$

Find the value of  $x$ .

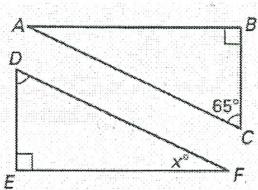
$$\underline{\underline{x = 20^\circ}}$$

12.



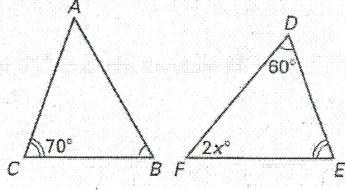
$$\underline{\underline{x = 11^\circ}}$$

13.



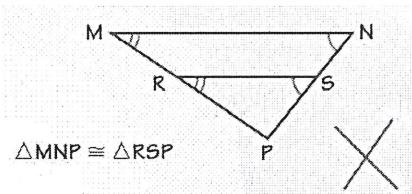
$$\underline{\underline{x = 25^\circ}}$$

14.



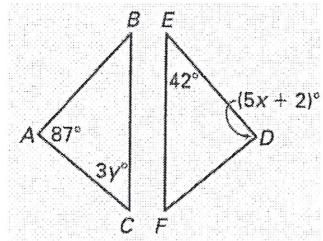
$$\underline{\underline{x = 25^\circ}}$$

15. A student says that  $\triangle MNP \cong \triangle RSP$  because the corresponding angles of the triangles are congruent.  
 Describe the error in this statement.



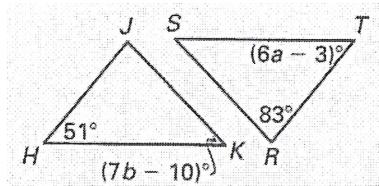
$\triangle MNP \not\cong \triangle RSP$ ; why?

16. Given:  $\triangle ABC \cong \triangle DEF$ , find the values of  $x$  and  $y$ .



$$x = 17^\circ; y = 17^\circ$$

17. Given:  $\triangle HJK \cong \triangle TRS$ , find the values of  $a$  and  $b$ .

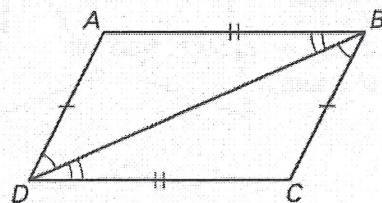


$$a = 9^\circ; b = 8^\circ$$

18. Prove.

**Given:** Get information from diagram

**Prove:**  $\triangle ABD \cong \triangle CDB$



Statement	Reason
1. $\overline{AD} \cong \overline{CB}$	1. Given
1. $\angle CBD \cong \angle ADB$	2. Reflexive Property
2. $\overline{DB} \cong \overline{BD}$	3. Third Angles Thm
3. $\angle A \cong \angle C$	4. Defn of congruent triangles
4. $\triangle ABD \cong \triangle CDB$	