

8:55
Do Now:

Geometry per. 2 Asberry

Adriana Lopez

Copy highlighted terms & Theorem 10/27/11
p. 198-199

9:20
check

HW: $3\angle X \angle 11$ $8\angle X \angle 26$

No because side lengths 8, 8, 17
 $8+8 > 17$ ←

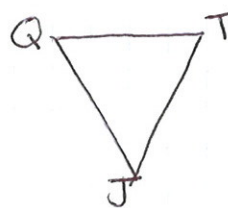
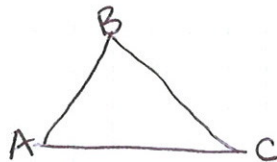
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Lesson

4-1 Congruent Figures

example 1:

$\triangle ABC \cong \triangle QJT$. List the congruent corresponding parts:

Congruent Statement



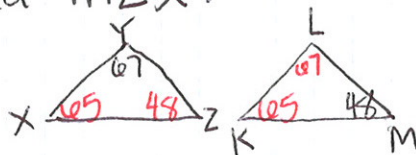
$\angle A \cong \angle Q$
 $\angle B \cong \angle T$
 $\angle C \cong \angle J$ } angles

$\overline{AB} \cong \overline{QT}$
 $\overline{BC} \cong \overline{TJ}$
 $\overline{AC} \cong \overline{QJ}$ } sides

example 2:

$\triangle XYZ \cong \triangle KLM$, $m\angle Y = 67$, $m\angle M = 48$,

Find $m\angle X$:



$Z \cong M$
 $m\angle M = 48$
 $m\angle Z = 48$

Triangle Angle-Sum Thm.

$$m\angle X + m\angle Y + m\angle Z = 180^\circ$$

$$X + 67 + 48 = 180$$

$$X + 115 = 180$$

$$\boxed{X = 65}$$

Homework:

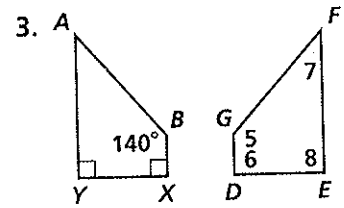
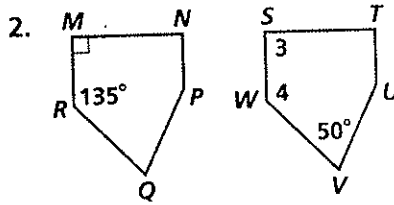
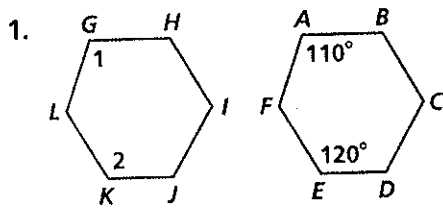
Assignment #34

Practice 4-1
(see WS) Congruent Figures

Practice 4-1

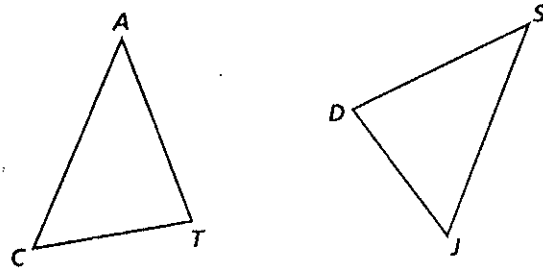
Congruent Figures

Each pair of polygons is congruent. Find the measures of the numbered angles.



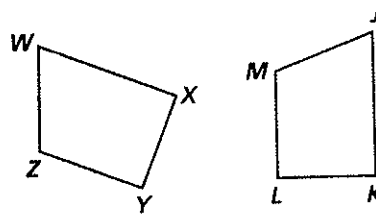
$\triangle CAT \cong \triangle JSD$. List each of the following.

4. three pairs of congruent sides
5. three pairs of congruent angles



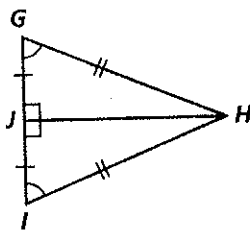
$WXYZ \cong JKLM$. List each of the following.

6. four pairs of congruent sides
7. four pairs of congruent angles

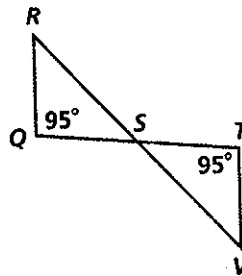


State whether the pairs of figures are congruent. Explain.

8. $\triangle GHJ$ and $\triangle IHJ$



9. $\triangle QRS$ and $\triangle TVS$



10. **Developing Proof** Use the information given in the diagram.

Give a reason that each statement is true.

- a. $\angle L \cong \angle Q$
- b. $\angle LNM \cong \angle PNQ$
- c. $\angle M \cong \angle P$
- d. $\overline{LM} \cong \overline{QP}$, $\overline{LN} \cong \overline{QN}$, $\overline{MN} \cong \overline{PN}$
- e. $\triangle LNM \cong \triangle QNP$

