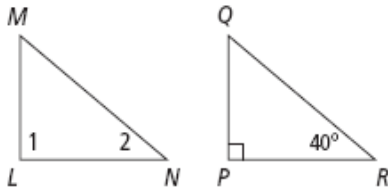


Math 2 Unit 3 Worksheet 1
Congruent Figures

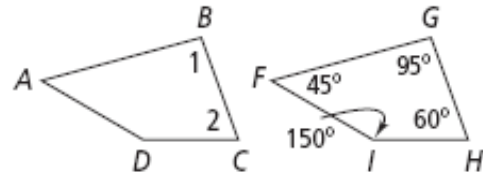
Name: _____
 Date: _____ Per: _____

[1-2] Each pair of polygons is congruent. Find the measures of the numbered angles.

1. $\triangle MLN \cong \triangle QPR$



2. $ABCD \cong FGHI$



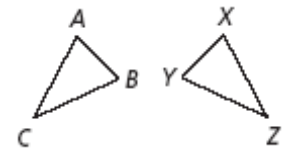
[3-7] Use the diagram to the right. Complete the congruence statements. $\triangle ABC \cong \triangle XYZ$

3. $\overline{AB} \cong$

6. $\angle Z \cong$

4. $\overline{ZY} \cong$

7. $\angle B \cong$



5. $\angle BAC \cong$

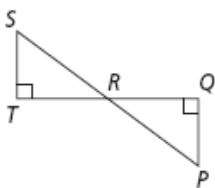
[8-9] Given $FOUR \cong MANY$. List each of the following.

8. Four pairs of congruent angles

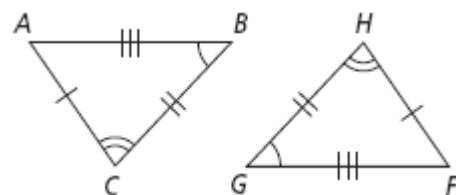
9. Four pairs of congruent sides

[10-11] Can you conclude that the figures are congruent? Justify your answer.

10. $\triangle SRT \cong \triangle PRQ$



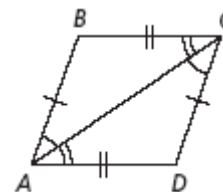
11. $\triangle ABC \cong \triangle FGH$



12. If $\triangle ABC \cong \triangle JKL$, which of the following must be a correct congruence statement?

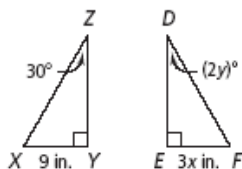
- A $\angle A \cong \angle L$ C $\angle B \cong \angle K$
 B $\overline{AB} \cong \overline{JL}$ D $\triangle BAC \cong \triangle LKJ$

13. **Reasoning:** A student says she can use the information in the figure to prove $\triangle ACB \cong \triangle ACD$. Is she correct? Explain in complete sentences.

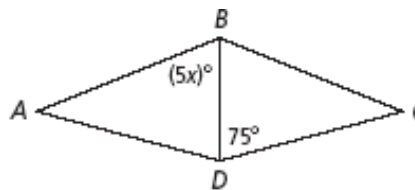


[14-15] Find the values of the variables.

14. $\triangle XYZ \cong \triangle FED$



15. $\triangle ABD \cong \triangle CDB$



[16-17] $\triangle FGH \cong \triangle QRS$. Find the measures of the given angles or the lengths of the given sides.

16. $m\angle F = x + 24$; $m\angle Q = 3x$

17. $\overline{GH} = 3x - 2$; $\overline{RS} = x + 6$