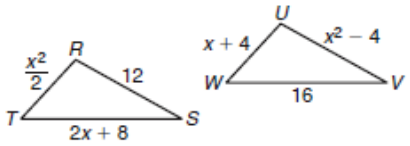
Geometry Name:_____ Date Due:_____Period:_____

Unit 4 Review Days 1-7

Use this space to show work for questions 1-5

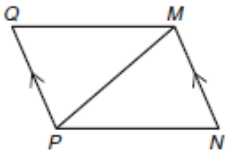
1. For which value of x is $\triangle RST \cong \triangle UVW$?



A 2 **C** $2\sqrt{5}$

B 4 **D** 12

2. What additional information is needed to prove $\triangle MNP \cong \triangle PQM$ by SAS?



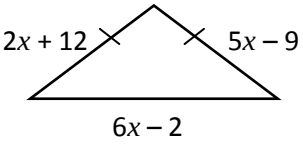
F $\angle N \cong \angle Q$

G $\angle MPN \cong \angle MPQ$

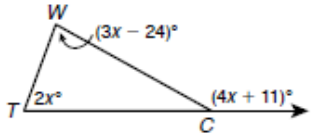
H $\overline{MQ} \cong \overline{PN}$

J $\overline{MN} \cong \overline{PQ}$

3. What is the length of the longest side of the triangle?



4. What is m$\angle W$?



A 35° **C** 70°

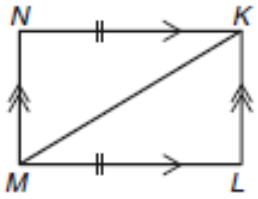
B $40.\overline{3}°$ **D** 81°

5. Suppose $\angle S \cong \angle N$, $\angle J \cong \angle I$, $\angle A \cong \angle T$, $\overline{JS} \cong \overline{IN}$, $\overline{JA} \cong \overline{IT}$, and $\overline{AS} \cong \overline{TN}$. Which is true?

F $\triangle JSA \cong \triangle ITN$ **H** $\triangle JSA \cong \triangle INT$

G $\triangle JSA \cong \triangle NTI$ **J** $\triangle JSA \cong \triangle TNI$

6. Given the diagram, show your plan of how you can prove $\Delta MNK \cong \Delta KLM$ by:



SAS ≅	ASA ≅	AAS ≅

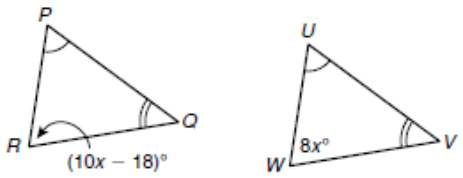
- What additional information is needed in order to prove the triangles ≅ by SSS ≅ ? _____
- What additional information is needed in order to prove the triangles ≅ by RHL ≅ ? _____
- After proving $\Delta MNK \cong \Delta KLM$, what reason would justify the statement $\overline{MN} \cong \overline{KL}$? _____

Use this space to show work for questions 7-10

7. What is the value of x if the acute angles of a right triangle measure $8x°$ and $12x°$?

A 4.5 **C** 9
B 5 **D** 10

8. In the figure, $\triangle PQR \cong \triangle UVW$. What is $m\angle R$?



F 42° **H** 88°
G 72° **J** 92°

9. If $\triangle KMQ \cong \triangle WJR$, which segment is congruent to $\overline{RW}$?

A $\overline{KM}$ **C** $\overline{QK}$
B $\overline{MQ}$ **D** $\overline{JW}$

10. Which angle is congruent to $\angle Z$ if $\triangle ZLV \cong \triangle SPN$?

F $\angle V$ **H** $\angle N$
G $\angle S$ **J** $\angle P$