# | due | section | assignment |
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<td>1</td>
<td>_____</td>
<td>4.1 Apply Triangle Sum Properties</td>
<td>read pgs 214-215, 217-220, GSP p63: Defining Triangles p221+ 1-7 all, 11-19 odd, 21-26 all, 33-37 odd</td>
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<td>2</td>
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<td>4.2 Apply Congruence and Triangles</td>
<td>read pgs 225-228, GSP p65: Triangle Sum and p66 Exterior Angles of a Triangle p228+: 4-10 all, 15, 16, 19 (you need two equations), 26, 28, 31, 37</td>
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<td>3</td>
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<td>4.3 Proving Triangles Congruent by SSS</td>
<td>read pgs 234-236, p236+: 1-7 all, 10, 11, 19, 25, 26</td>
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<td>4</td>
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<td>4.4 Proving Triangles Congruent by SAS and HL</td>
<td>read pgs 240-242, GSP p68: Triangle Congruence p243+: 3-7 odd, 9-14 all, 20-21, 34-36 all, 37 (also given is $KJ \perp JM$ and $KL \perp LM$)</td>
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<td>5</td>
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<td>4.5 Proving Triangles Congruent by ASA and AAS</td>
<td>read pgs 249-252, GSP Demo: Why SSA Doesn’t Work p252+: 3-5 all, 31-34 all and problem on back of this page</td>
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<td>6</td>
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<td>4.6 Using Congruent Triangles</td>
<td>read pgs 256-258, p259+: 3-8 all, 10, 11, 41-46 and the proofs A, B, C on back of this page</td>
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<td>7</td>
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<td>4.7 Use Isosceles and Equilateral Triangles</td>
<td>read pgs 264-266, GSP p69: properties of Isosceles Triangles p267+: 1-6 all, 11-13 all, 20, 22, 23, 24</td>
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<td>8</td>
<td>_____</td>
<td>Review</td>
<td>Chapter Test, p286: 1-11, Chapter Review, p282+: 6-8, 15-18, 21-23</td>
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Note 1: Explain your reasoning for these problems.  
Note 2: Mark the figure. State the corresponding congruence and state the congruence postulate or theorem (SSS, SAS, HL, ASA, AAS) that applies.
4.5 Additional Problem

**GIVEN:** \( TU \equiv TW \)
\( UX \equiv XW \)

**PROVE:** \( \triangle TUV \equiv \triangle TWV \)

First prove \( \triangle TUX \equiv \triangle TWX \).

Then use corresponding congruent parts from that congruence to prove \( \triangle TUV \equiv \triangle TWV \).

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4.6 Additional Problems

A) **GIVEN:** \( \angle K \equiv \angle H \)
\( FK = GH \)
\( \angle KFG \) and \( \angle HGF \) are right

**PROVE:** \( \angle KGF \equiv \angle HFG \)

B) **GIVEN:** \( \angle A \equiv \angle D \)
\( \angle AEB \equiv \angle DEC \)
\( AB = DC \)

**PROVE:** \( \angle EBD \equiv \angle ECA \)

Hint: One way is to prove \( \triangle AEB \equiv \triangle DEC \) and use some corresponding parts to then try to get \( \triangle ACE \equiv \triangle DBE \).

Another way is to show that the two angles you want to prove congruent are supplements of congruent angles.

C) **GIVEN:** \( \angle PQT \equiv \angle RST \)
\( QT = ST \)

**PROVE:** \( \angle TPS \equiv \angle TRQ \)

Hint: First prove \( \triangle PQT \equiv \triangle RST \) and use some corresponding parts to get \( \triangle PTS \equiv \triangle RTQ \)