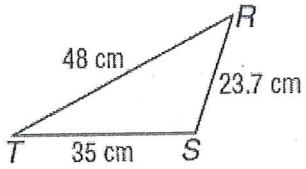
Name: _____ Date: _____ Hour: _____

Triangle Inequalities Homework #2

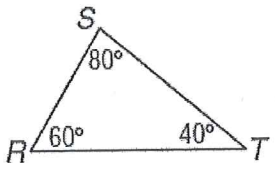
List the angles or sides in order from least to greatest measure.

1.



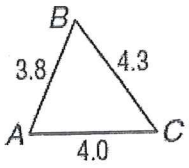
∠T, ∠R, ∠S

2.



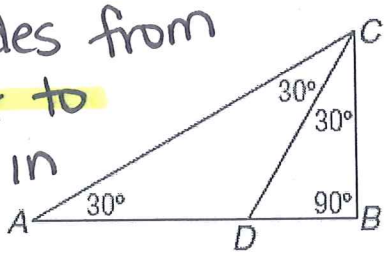
$\overline{RS}$, $\overline{ST}$, $\overline{RT}$

3.



∠C, ∠B, ∠A

4. List sides from greatest to least in each triangle.

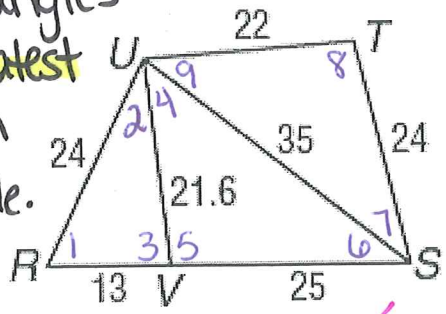


△CDB: $\overline{DC}$, $\overline{CB}$, $\overline{DB}$

△ADC: $\overline{AC}$, $\overline{AD} = \overline{DC}$.

△ABC: $\overline{AC}$, $\overline{AB}$, $\overline{CB}$

5. List angles from greatest to least in each triangle.



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△URV: ∠3, ∠1, ∠2

△UVS: ∠5, ∠4, ∠6

△UTS: ∠8, ∠9, ∠7

△URS: ∠2+∠4, ∠1, ∠6

Name: _____ Date: _____ Hour: _____

Advanced Triangle Practice Homework

Identify the indicated type of triangles if $\overline{AB} \cong \overline{AD} \cong \overline{BD} \cong \overline{DC}$, $\overline{BE} \cong \overline{ED}$, $\overline{AB} \perp \overline{BC}$, and $\overline{ED} \perp \overline{DC}$.

Use figure one for #1-4.

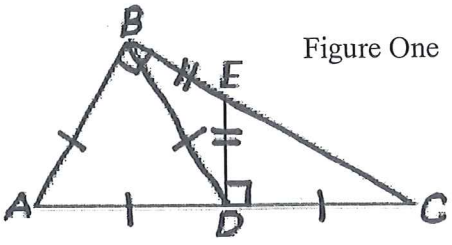


Figure One

1. **Right**

△ ABC, △ CDE

2. **Obtuse**

△ BED, △ BDC

3. **Scalene**

△ ABC, △ CDE

4. **Isosceles**

△ ABD, △ BED, △ BDC

Use figure two for #5 – 8.

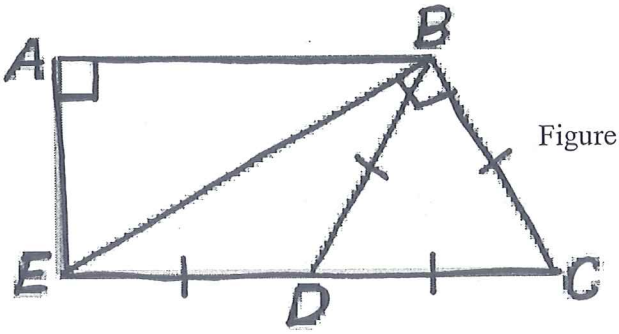


Figure Two

5. **Right**

△ ABE, △ BCE

6. **Obtuse**

△ BDE

7. **Scalene**

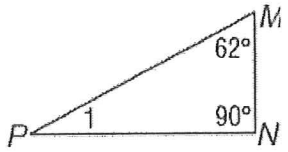
△ ABE, △ BCE

8. **Isosceles**

△ BDE

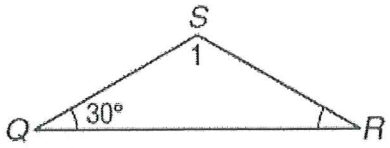
Use the Triangle Sum Theorem to find the numbered angles listed below each figure.

1.



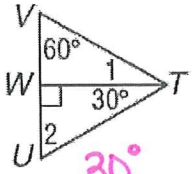
<1= 28°

2.



m<1= 120°

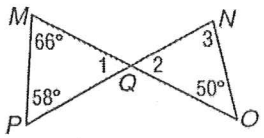
3.



m<1= 30°

m<2= 60°

4.

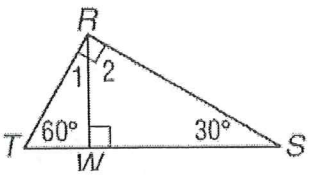


m<1= 56°

m<2= 56°

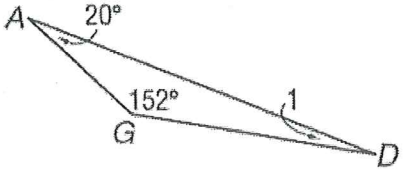
m<3= 74°

5.



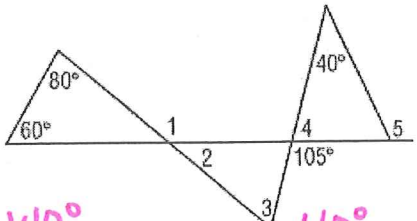
m<1= 30°

6.



m<1= 8°

7.



m<1= 140°

m<3= 65°

m<5 = 115°

m<2 = 40°

m< 4= 75°