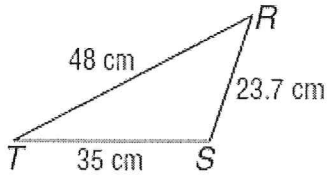


## Triangle Inequalities Homework #2

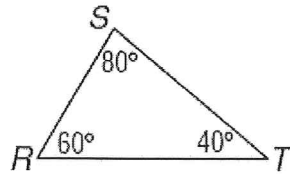
List the angles or sides in order from least to greatest measure.

1.



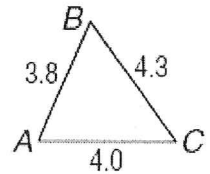
$\angle T, \angle R, \angle S$

2.



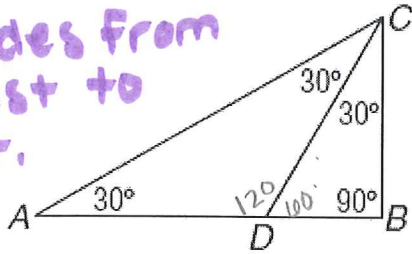
$\overline{RS}, \overline{ST}, \overline{RT}$

3.



$\angle C, \angle B, \angle A$

4. list sides from greatest to least.



$AC > AD = DC$

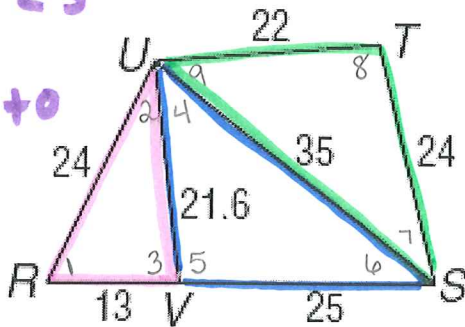
$DC > CB$

$CB > DB$

$\{ \overline{AC} > \overline{AD} = \overline{DC} > \overline{CB} > \overline{DB} \}$

5. list  $\angle S$

from greatest to least.



$\angle 3 > \angle 1 > \angle 2$

$\angle 5 > \angle 4 > \angle 6$

$\angle 8 > \angle 9 > \angle 7$

Just do each  $\Delta$  separately.

## Advanced Triangle Practice Homework #1

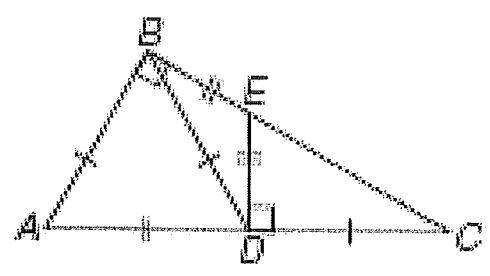
Identify the indicated type of triangles if  $\overline{AB} \cong \overline{AD} \cong \overline{BD} \cong \overline{DC}$ ,  $\overline{BE} \cong \overline{ED}$ ,  $\overline{AB} \perp \overline{BC}$ , and  $\overline{ED} \perp \overline{DC}$ .

1. Right  
 $\triangle ABC, \triangle CDE$

2. Obtuse  
 $\triangle BED, \triangle BDC$

3. Scalene  
 $\triangle ABC, \triangle CDE$

4. Isosceles  
 $\triangle ABD, \triangle BED, \triangle BDC$

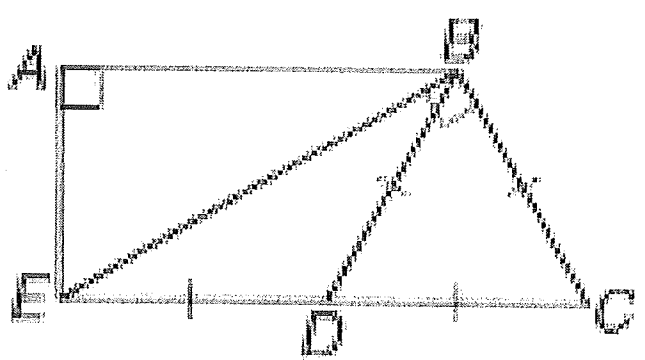


5. Right  
 $\triangle ABE, \triangle BCE$

6. Obtuse  
 $\triangle BCD, \triangle BDE$

7. Scalene  
 $\triangle ABE, \triangle BCE$

8. Isosceles  
 $\triangle BDE$



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

1.   
  $m\angle 1 = \underline{28^\circ}$

2.   
  $m\angle 1 = \underline{120^\circ}$

3.   
  $m\angle 1 = \underline{30^\circ}$   
 $m\angle 2 = \underline{60^\circ}$

4.   
  $m\angle 1 = \underline{56^\circ}$   
 $m\angle 2 = \underline{56^\circ}$   
 $m\angle 3 = \underline{74^\circ}$

5.   
  $m\angle 1 = \underline{30^\circ}$

6.   
  $m\angle 1 = \underline{8^\circ}$

7.   
  $m\angle 1 = \underline{140^\circ}$   
 $m\angle 2 = \underline{40^\circ}$   
 $m\angle 3 = \underline{65^\circ}$   
 $m\angle 4 = \underline{75^\circ}$   
 $m\angle 5 = \underline{115^\circ}$