The largest side is opposite the largest angle
The smallest side is opposite the smallest angle

Name Schlansky
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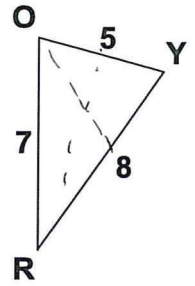
Date _____
Geometry

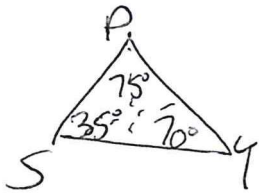
Corresponding Sides and Angles

1. What is the largest angle of ΔROY? What is the smallest angle of ΔROY?



largest: ∠O
Smallest: ∠R

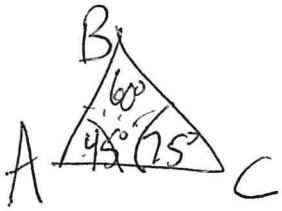
2. In triangle SPY, $m\angle S = 35°$ and $m\angle Y = 70°$. What is the largest side of the triangle? What is the shortest side of the triangle?



35 + 70 = 105
180 − 105 = 75°

Largest: $\overline{SY}$
Smallest: $\overline{PY}$

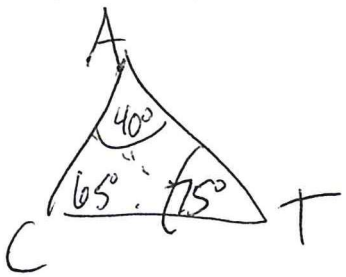
3. In ΔABC, $m\angle A = 45°$ and $m\angle B = 60°$. What is the largest side of ΔABC ? What is the smallest side of ΔABC?



60 + 45 = 105
180 − 105 = 75°

largest: $\overline{AB}$
smallest: $\overline{BC}$

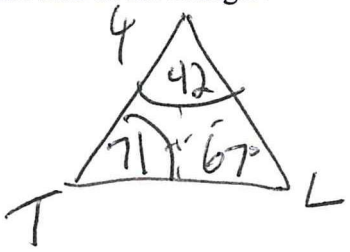
4. In ΔCAT, $m\angle C = 65$, and $m\angle A = 40$. Which side is the shortest? Which side is the longest?



65 + 40 = 105
180 − 105 = 75°

largest: $\overline{AC}$
smallest: $\overline{CT}$

5. In triangle TYL, $m\angle T = 71°$ and $m\angle Y = 42°$. What is the smallest side of the triangle? What is the largest side of the triangle?



71 + 42 = 113 180 − 113 = 67

largest: $\overline{YL}$

smallest: $\overline{TL}$

6. In triangle LYS, $m\angle L = 48°$ and $m\angle Y = 101°$. What is the smallest side of the triangle? What is the largest side of the triangle?

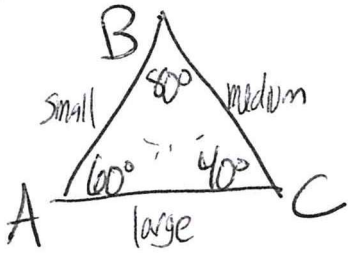
101 + 48 = 149 180 − 149 = 31

largest: $\overline{LS}$

smallest: $\overline{YL}$

7. In ΔABC, $m\angle A = 60$, $m\angle B = 80$, and $m\angle C = 40$. Which inequality is true?

1) $AB > BC$ S > M
2) $AC > BC$ L > M
3) $AC < BA$ L < S
4) $BC < BA$ M < S



8. In the diagram of quadrilateral $NAVY$ below, $m\angle YNA = 30°$, $m\angle YAN = 38°$, $m\angle AVY = 94°$, and $m\angle VAY = 46°$.

Which segment has the shortest length?

1) $\overline{AY}$ S△AYN, L△AYV
2) $\overline{NY}$ M△AYN
3) $\overline{VA}$ S△AYV
4) $\overline{VY}$ M△AYV

30 + 38 = 68 180 − 68 = 112

94 + 46 = 140 180 − 140 = 40