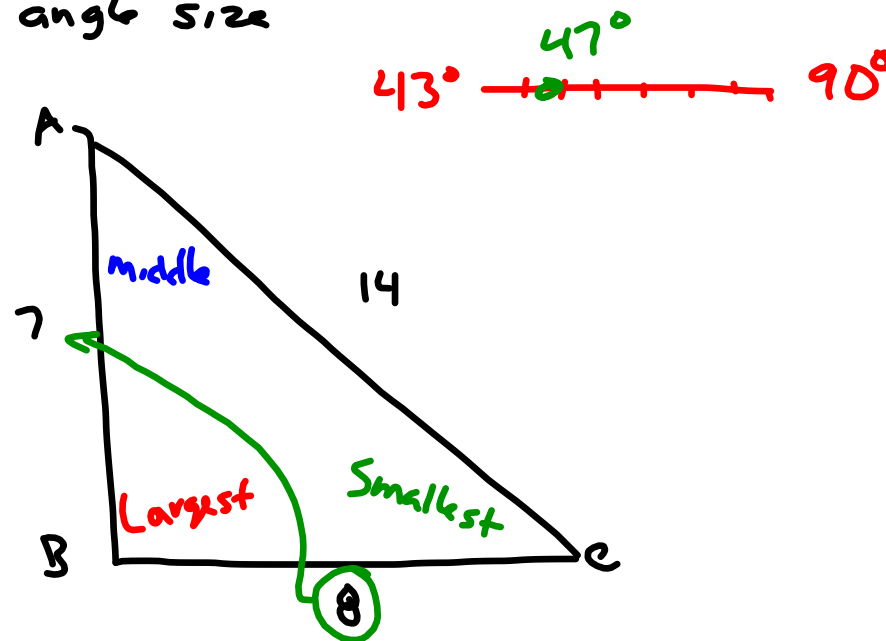
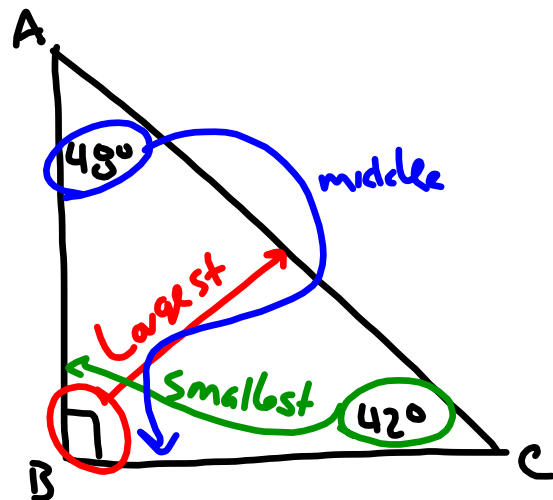
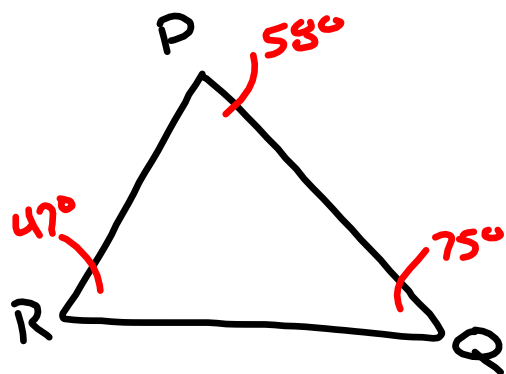


## Section 5.5 Inequalities with sides and angles in triangles

Obj: Determine side size by angle size





$$\begin{aligned} m\angle P &= 58^\circ \\ m\angle Q &= 75^\circ \\ m\angle R &= 47^\circ \end{aligned}$$

$\overline{PQ}, \overline{RQ}, \overline{PR}$

$$\begin{aligned} m\angle P &= 6x + 4 \\ m\angle Q &= 7x + 12 \\ m\angle R &= 6x - 7 \end{aligned}$$

List the sides  
in order from least  
to greatest.

$$6x + 4 + 7x + 12 + 6x - 7 = 180$$

$$19x + 9 = 180$$

$$19x = 171$$

$$\boxed{x = 9}$$

pg 243  
1, 2, 4-9 all  
15-24 all  
31-35 all