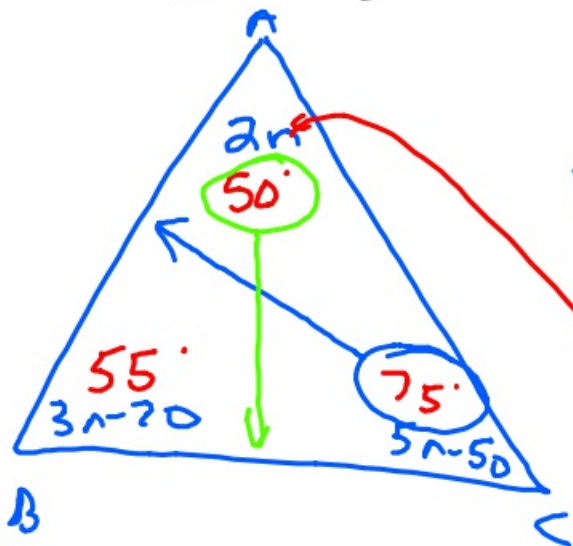


11-25-19 2nd Geo

Could these be the sides of a Δ ?

- | | | | | | |
|---|---------|-----|----|----|-----|
| ① | 2, 3, 7 | 1 | 5 | No | |
| ② | 3, 1, 5 | 2 | 4 | No | |
| ③ | 2, 2, 2 | Eq. | 0 | 4 | Yes |
| ④ | 1, 4, 5 | 3 | 5 | No | |
| ⑤ | 6, 4, 2 | 2 | 10 | No | |
| ⑥ | 1, 8, 7 | 7 | 9 | No | |

- ⑦ In ΔABC , $\angle A = 2n$, $\angle B = 3n - 20$ and $\angle C = 5n - 50$. Which side is longest and which is shortest?



$$2n + 3n - 20 + 5n - 50 = 180$$

$$10n - 70 = 180$$

$$+ 70 \quad + 70$$

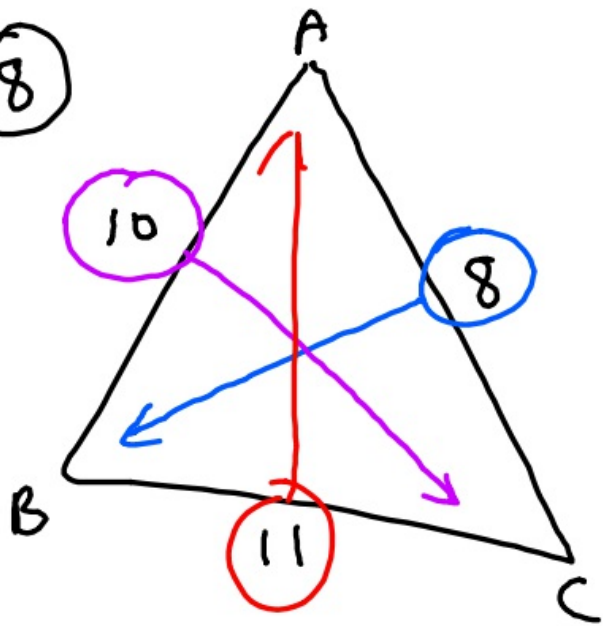
$$\hline 10n = 250$$

$$n = 25$$

Longest = \overline{AB}

Smallest = \overline{BC}

8



Put angles in order from smallest to largest.

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

9

$A = (2, 10)$

$$D = \sqrt{\Delta x^2 + \Delta y^2}$$

$$\sqrt{1^2 + 4^2}$$

$$\sqrt{17}$$

$$\sqrt{5^2 + 5^2}$$

$$\sqrt{50}$$

Largest $\angle = \angle B$

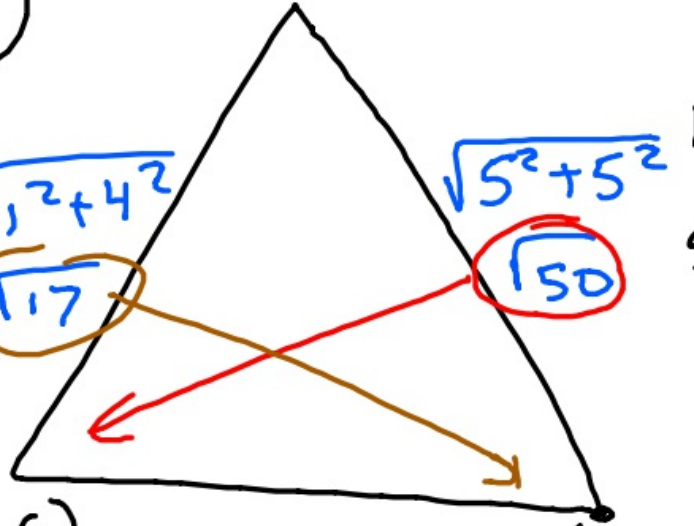
Shortest $\angle = \angle C$

$B = (1, 6)$

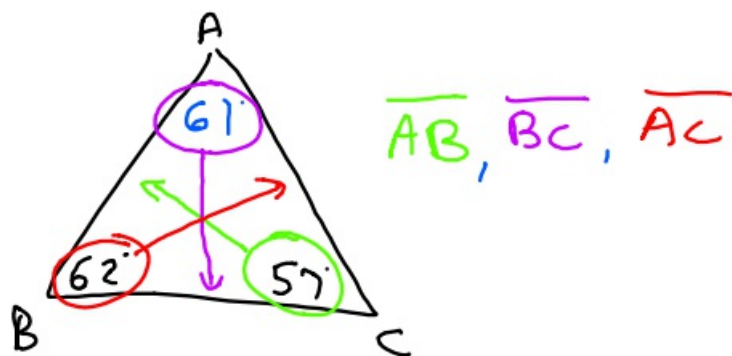
$$\sqrt{6^2 + 12^2}$$

$$\sqrt{37}$$

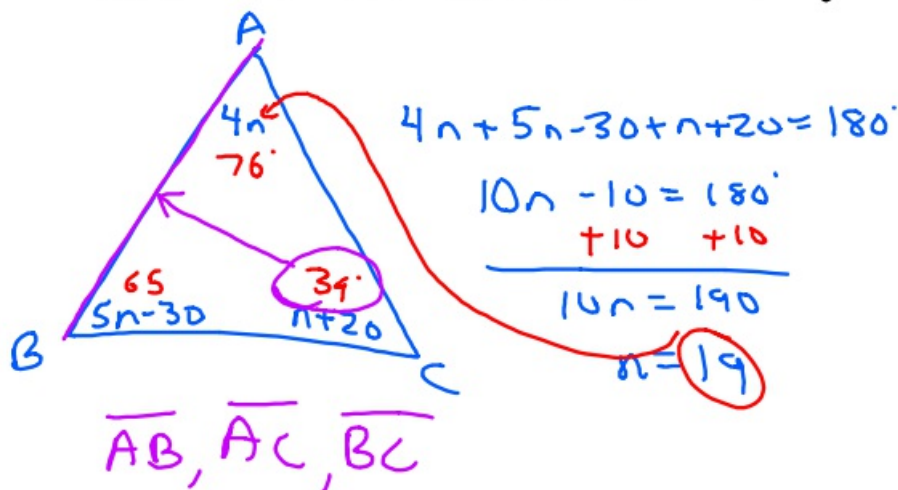
$C = (7, 5)$



- ⑩ Put sides in order from smallest to largest.



- ⑪ In $\triangle ABC$, $\angle A = 4n$, $\angle B = 5n - 30$, and $\angle C = n + 20$. Put sides in order from smallest to largest.



- ⑫ Which describes the 3rd side possibility of a \triangle if two of the sides are 8 and 10?

- A $8 < m < 10$
 B $2 \leq m \leq 18$
 C $2 < m < 18$
 D $2 > m > 18$