

11-12-19 6<sup>th</sup> Geo

Ch. 5 PT 2

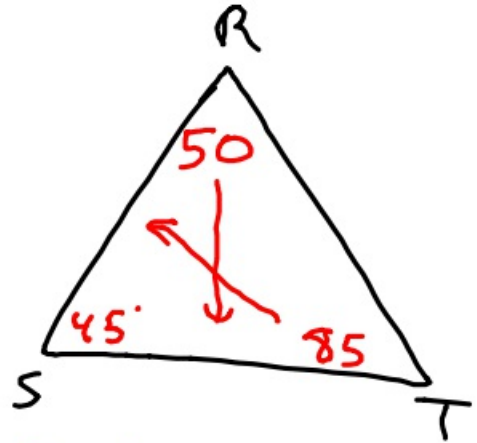
(26)

$\triangle RST$

$$\angle R = x + 10$$

$$\angle S = x + 5$$

$$\angle T = 3x - 35$$



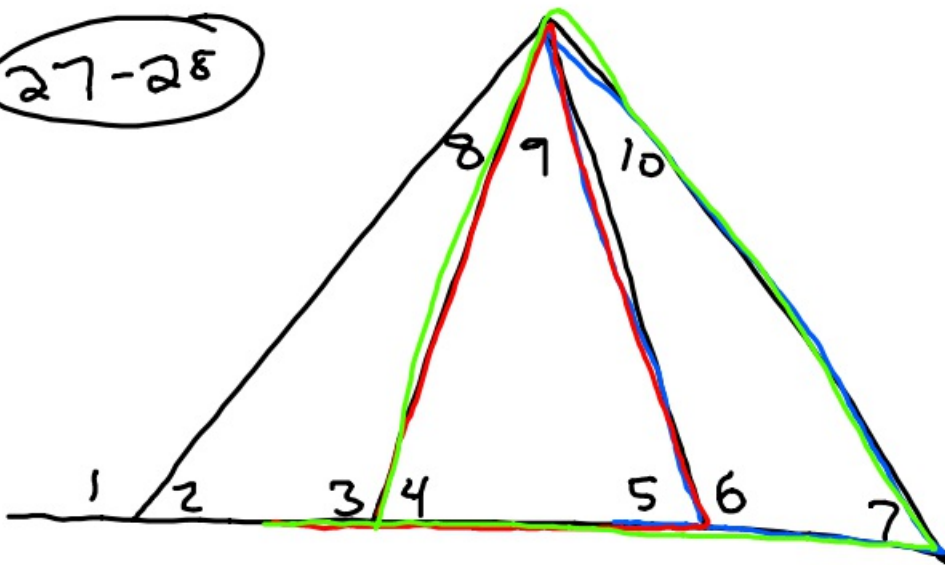
$$x + 10 + x + 5 + 3x - 35 = 180$$

$$5x - 20 = 180$$

$$x = 40$$

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

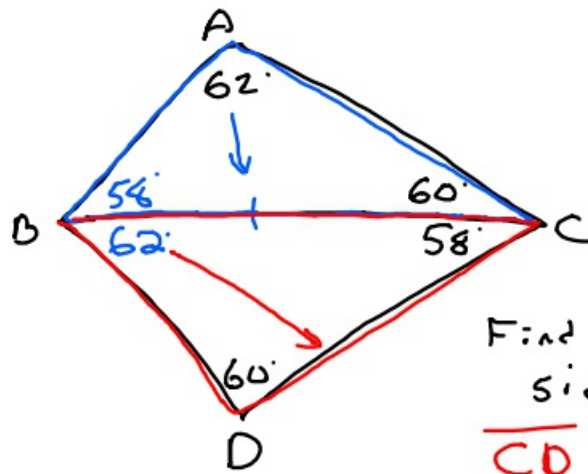
(27-28)



$\angle 5$  is larger than  $\angle 7$  &  $\angle 10$

$\angle 3$  is larger than  $\angle 5$  &  $\angle 9$ ,  $\angle 7$ ,  $\angle 10$

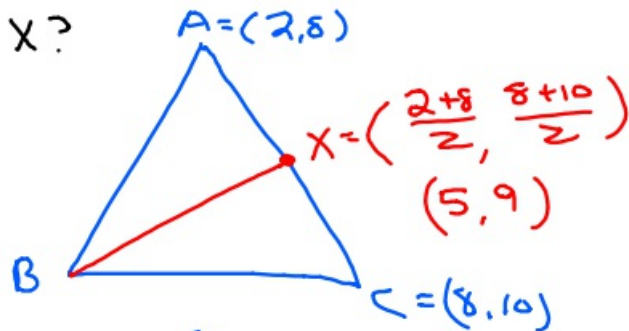
New



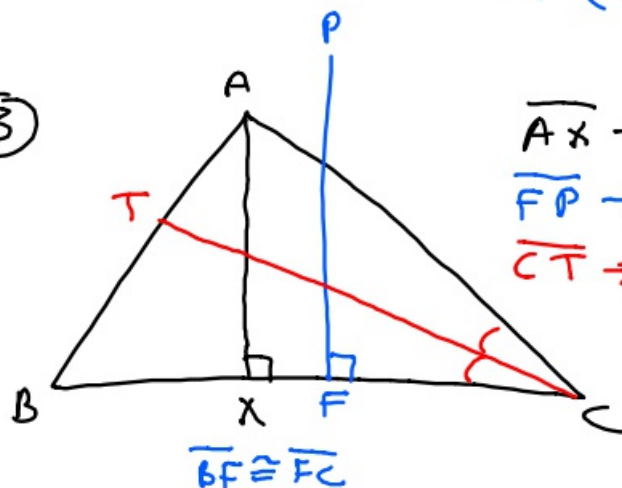
Find the longest side.

CD

- ②  $\triangle ABC$  has  $A=(2,8)$ ,  $B=(14,20)$ , and  $C=(8,10)$ . If  $\overline{BX}$  is median of  $\triangle ABC$ , what are coordinates of  $X$ ?



③

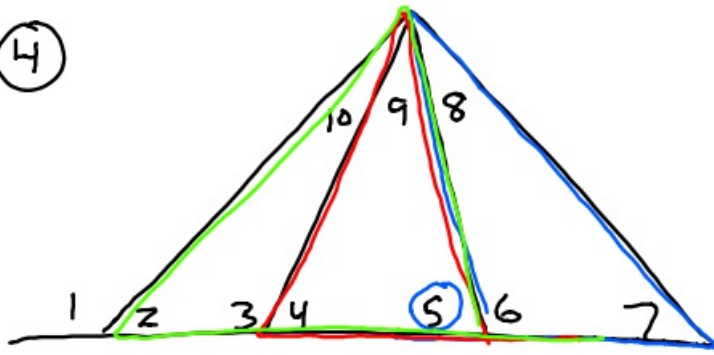


$\overline{AX} \rightarrow$  altitude

$\overline{FP} \rightarrow \perp$  bisector

$\overline{CT} \rightarrow$  Angle bisector

④



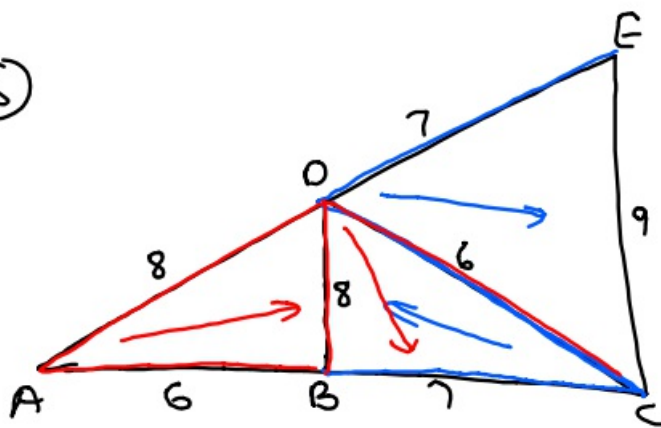
$$\angle 5 > \underline{7, 8}$$

$$\angle 6 > \underline{4, 9 \quad 2, 10}$$

⑤ Which can be  $\Delta$ 's.

- a.)  $(2, 4), 10$   $\overset{2}{\curvearrowright} \overset{6}{\curvearrowright}$  NO
- b.)  $3, 3, 3$  equilateral  $\overset{0}{\curvearrowright} \overset{6}{\curvearrowright}$  YES
- c.)  $7, 1, 8$   $\overset{6}{\curvearrowright} \overset{8}{\curvearrowright}$  NO
- d.)  $4, 4, 1$   $\overset{0}{\curvearrowright} \overset{8}{\curvearrowright}$  YES
- e.)  $3, 5, 8$   $\overset{2}{\curvearrowright} \overset{8}{\curvearrowright}$  NO

⑥



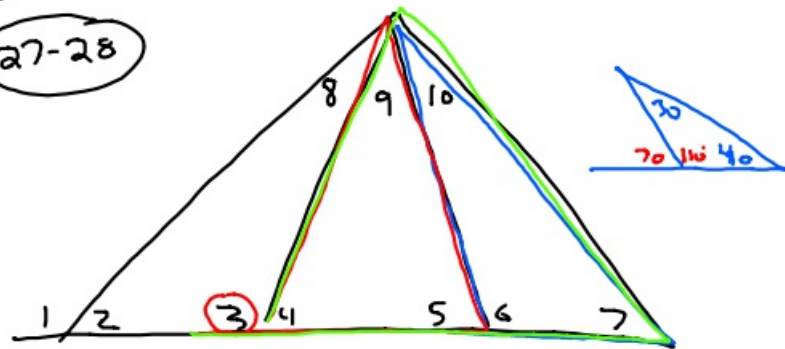
$$\angle BCD < \angle EDC$$

$$\angle DAB > \angle BDC$$

11-12-19 7<sup>th</sup> Geo

Ch. 2 PT 2

(27-28)



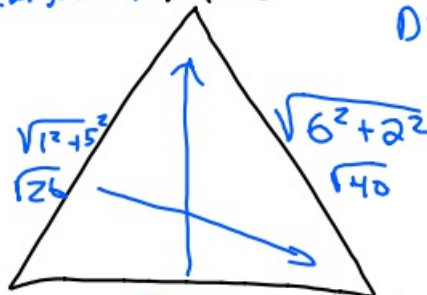
$\angle 5 > \angle 7 + \angle 10$

$\angle 3 > \angle 5, 9, 7, 10$

(16)  $A=(3,4)$   $B=(2,-1)$   $C=(9,2)$

Largest  $\rightarrow A(3,4)$

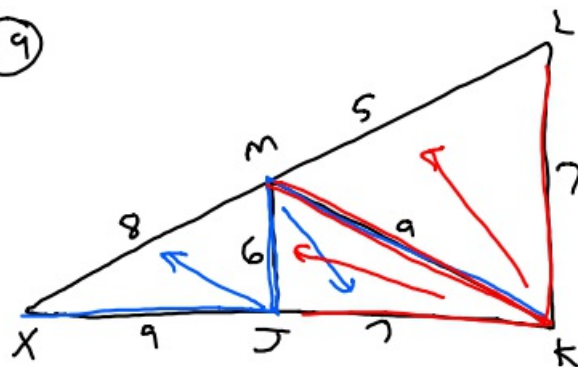
$D = \sqrt{\Delta x^2 + \Delta y^2}$



$B=(2,-1)$   $C=(9,2)$  - smallest

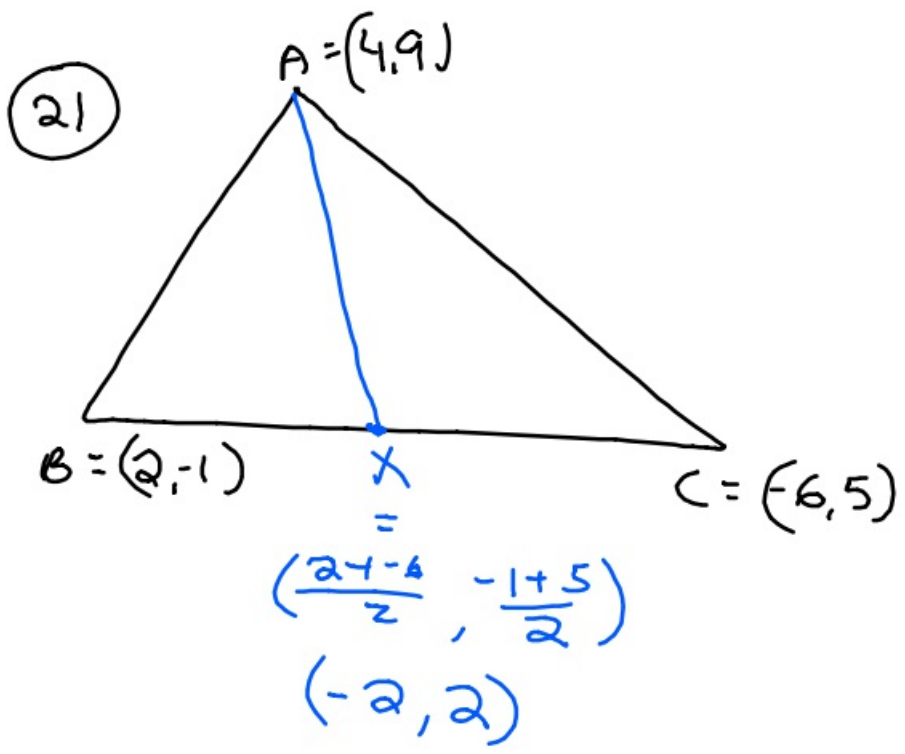
(9)  $(3,3,6)$   $0 < m < 6$  NO

(19)

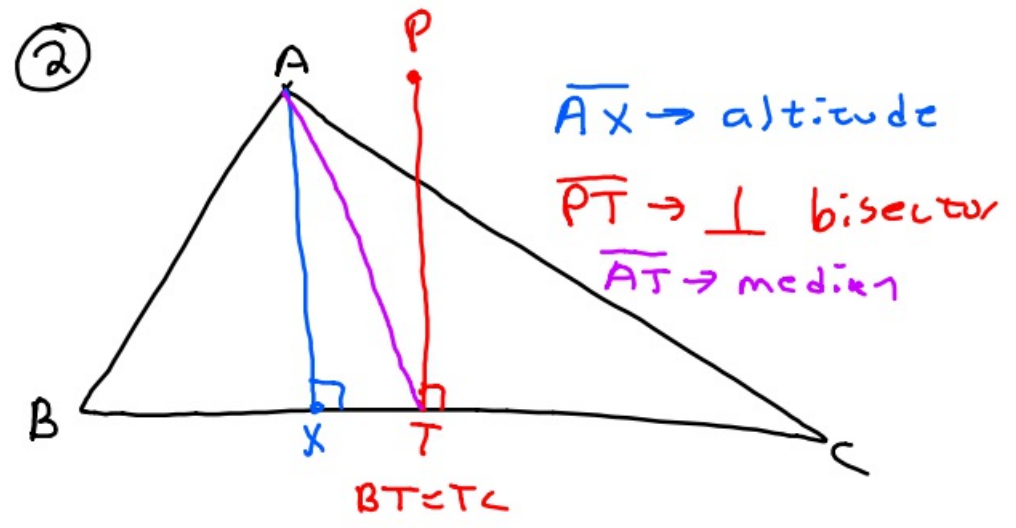
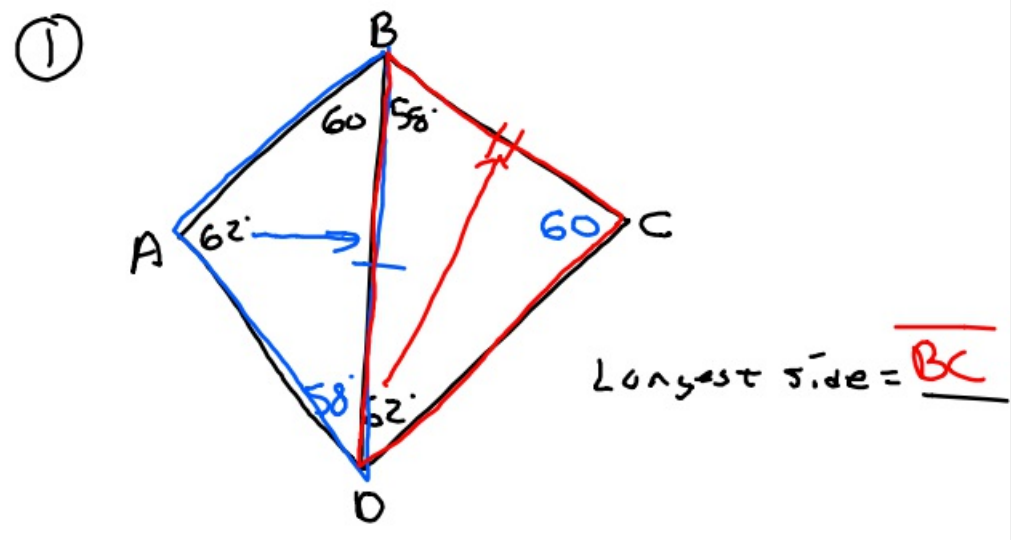


(19)  $\angle JMK \leq \angle MJX$

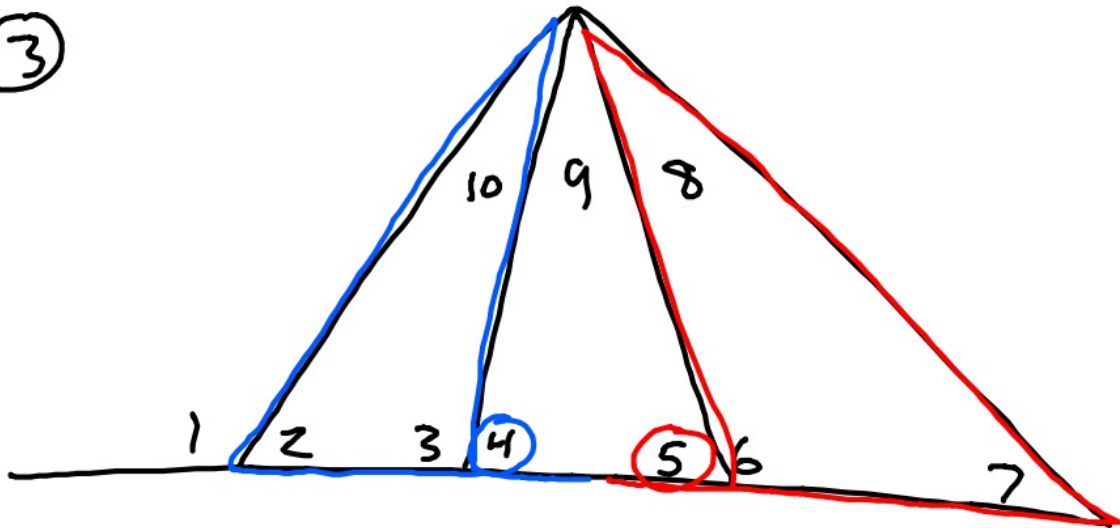
(20)  $\angle MKJ > \angle MKL$



New practice



③



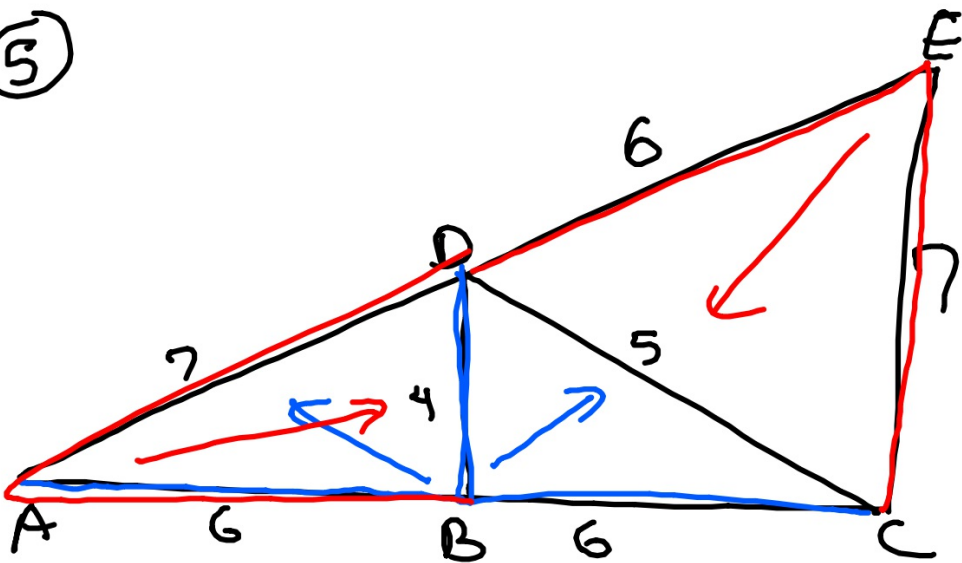
$$\angle 4 > \underline{2, 10}$$

$$\angle 5 > \underline{7, 8}$$

④ Which could be  $\triangle S$ ?

- |     |         |             |                   |
|-----|---------|-------------|-------------------|
| a.) | 4, 4, 4 | $0 < m < 8$ | Yes (Equilateral) |
| b.) | 5, 2, 8 | $3 < m < 7$ | NO                |
| c.) | 1, 1, 9 | $0 < m < 2$ | NO                |
| d.) | 2, 3, 5 | $1 < m < 5$ | NO                |
| e.) | 6, 3, 3 | $3 < m < 9$ | NO                |

5



$$\angle ABD > \angle CBD$$

$$\angle DEC > \angle BAD$$