

12-2-13
5th Geo

8 questions like

Can this be a \triangle

① $\boxed{3,4,6}$ 1 \rightarrow 7 Yes

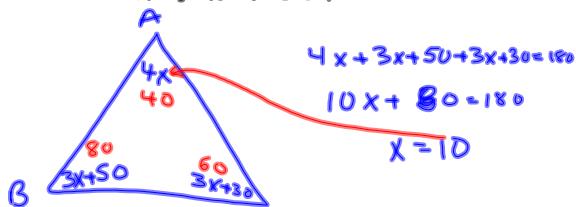
② $\boxed{8,8,16}$ 0 \rightarrow 16 No

③ $\boxed{5,5,5}$ 0 \rightarrow 10 Yes

④ In $\triangle ABC$ $\angle A = 4x$, $\angle B = 3x + 50$

and $\angle C = 3x + 30$.

Which side is longest and
which is shortest?



$$\text{Largest} = \overline{AC}$$

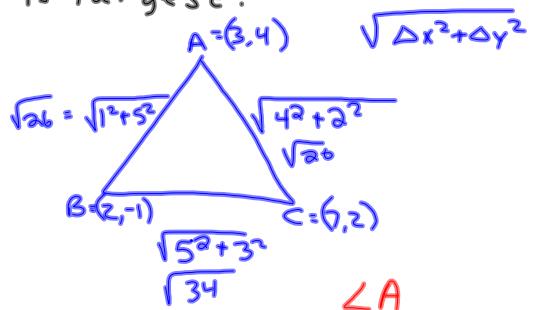
$$\text{Smallest} = \overline{BC}$$

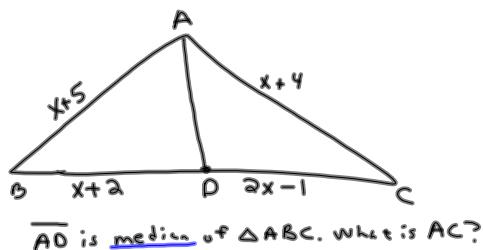
If two sides of a \triangle have measurements of 2 and 8, what could the third leg be?

$$6 < m < 10$$

In $\triangle ABC$, $A = (3, 4)$, $B = (2, -1)$

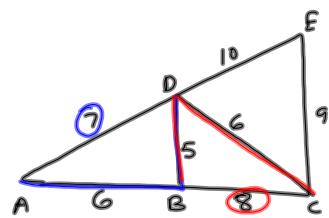
and $C = (7, 2)$. Which angle is largest?



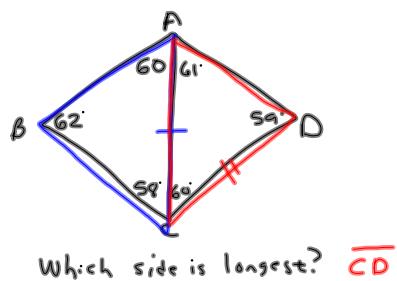
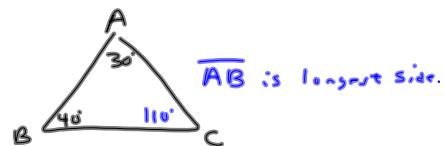


\overline{AD} is median of $\triangle ABC$. What is AC ?

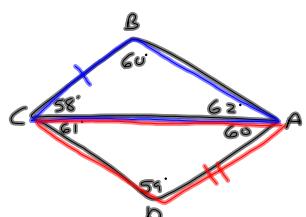
$$\begin{array}{r} x+2 = 2x-1 \\ -x \quad -x \\ \hline 2 = x-1 \\ +1 \quad +1 \\ \hline 3 = x \end{array} \quad \therefore AC = x+4 = 3+4 = 7$$



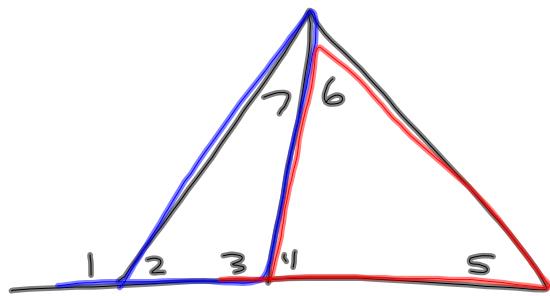
$\angle ABD < \angle CDB$



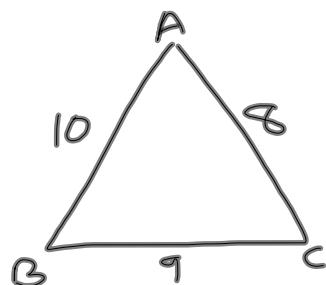
Which side is longest? \overline{CD}



Which side is longest?
Can't be determined

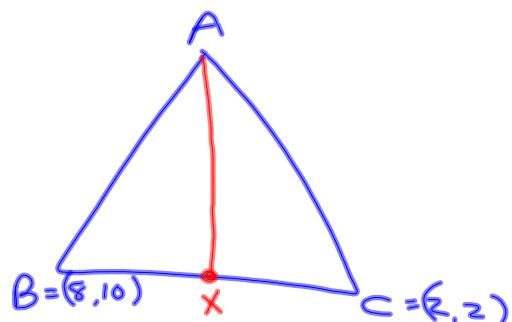


$\angle 1$ is greater than which angles?
 $\angle 3, \angle 7$ $\angle 5, \angle 6$



which angle is largest? $\angle C$

In $\triangle ABC$, $A = (4, 6)$ $B = (8, 10)$
 and $C = (2, 2)$. If \overline{AX} is a
 median of $\triangle ABC$, what is the
 coordinate value of x ?



$$X = \left(\frac{8+2}{2}, \frac{10+z}{2} \right)$$

$$(5, 6)$$

12-2-13

6th Geo

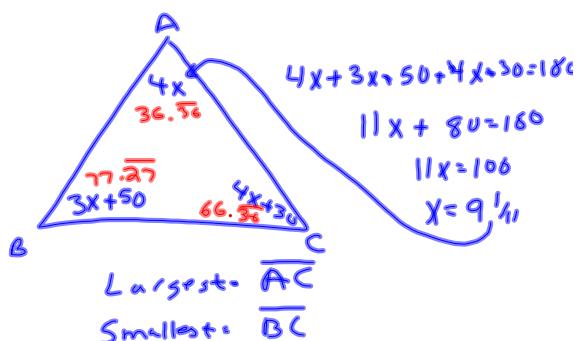
5-12 will be
Can the given set be a \triangle

- ① $\boxed{3, 4, 6}$ 1 Yes
- ② $\boxed{5, 5, 10}$ 0 No
- ③ $\boxed{2, 2, 2}$ 0 Yes

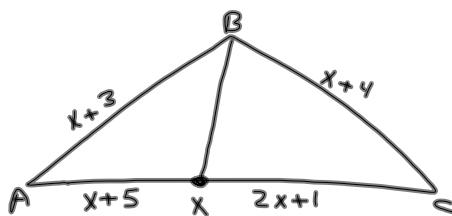
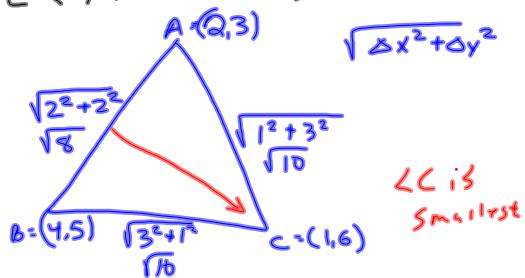
④ If 2 sides of a \triangle have measurements of 8 and 7,
what could the 3rd leg be?

- A $1 < m < 15$
B $1 \leq m \leq 15$
C $1 > m > 15$
D $1 < m > 15$

⑤ In $\triangle ABC$, $\angle A = 4x$
 $\angle B = 3x + 50$, and $\angle C = 4x + 30$.
What is the longest side?
Shortest side?



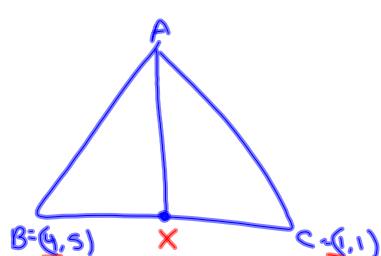
In $\triangle ABC$, $A = (2, 3)$ $B = (4, 5)$
 $C = (1, 6)$. Which angle is smallest?



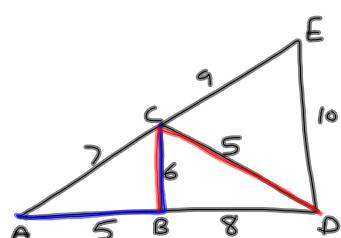
If \overline{BX} is median, what is BC ?

$$\begin{array}{r} x+5 = 2x+1 \\ -x \quad -x \\ \hline 5 = x+1 \\ -1 \quad -1 \\ \hline 4 = x \end{array} \quad BC = x+4 = 4+4 = 8$$

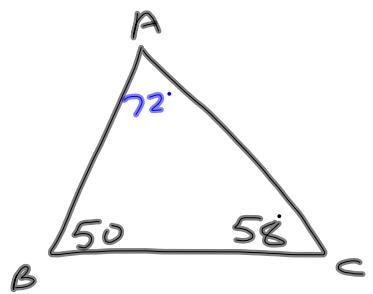
In $\triangle ABC$, $A = (2, 3)$ $B = (4, 5)$
and $C = (1, 1)$. If \overline{AX} is
median of $\triangle ABC$, what are the
coordinate values of X ?



$$X = \left(\frac{4+1}{2}, \frac{5+1}{2} \right) = \left(\frac{5}{2}, 3 \right)$$



$$\angle ABC < \angle DCB$$



\overline{BC} is longest side

