

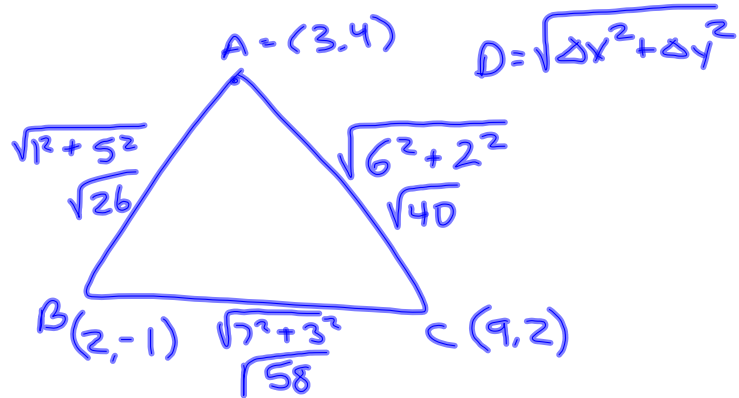
1-9-14

Ch. 5 PT 2

(16) In  $\triangle ABC$

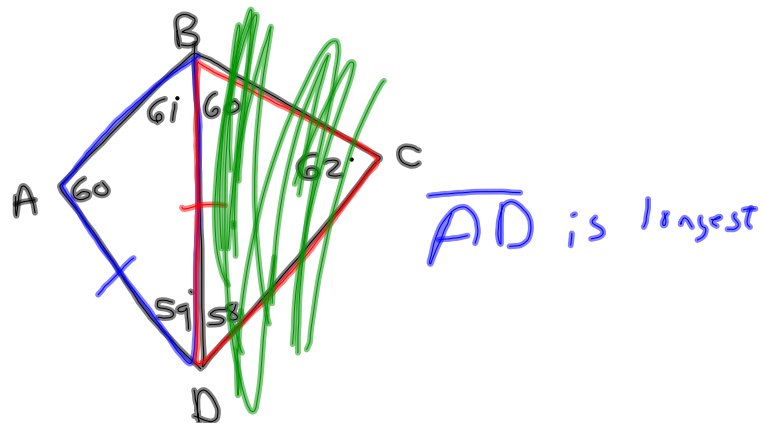
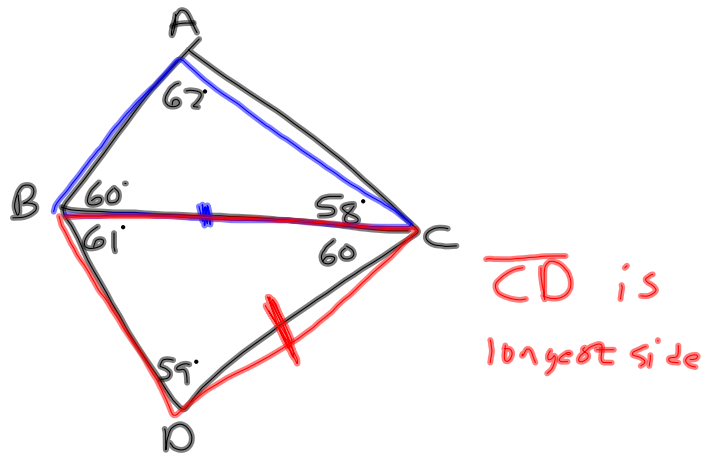
$A = (3, 4)$   $B = (2, -1)$   $C = (9, 2)$

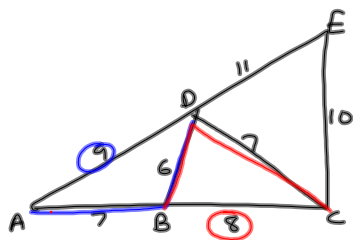
What is largest and smallest  $\angle$ ?



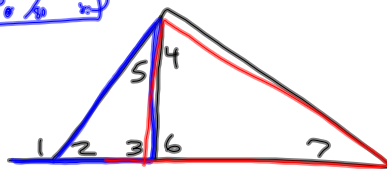
Largest =  $\angle A$

Smallest =  $\angle C$

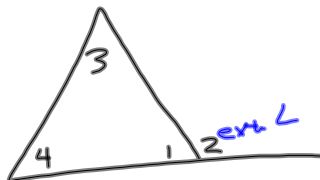




$$\angle ABD > \angle BDC$$



$\angle 1$  is larger than  $\angle 3, \angle 5, \angle 4, \angle 7$ .



$\angle 2$  is larger than  $\angle 3$  and  $\angle 4$ .

2 sides of a  $\Delta$  have lengths of 5 and 12. What could 3<sup>rd</sup> side be?

$$5, 12 \quad 7 < m < 17$$

In  $\Delta ABC$ ,  $\angle A = 3x + 50$

$$\angle B = 4x$$

$$\angle C = 4x + 20.$$

What is shortest side?



$\overline{AC}$  is smallest

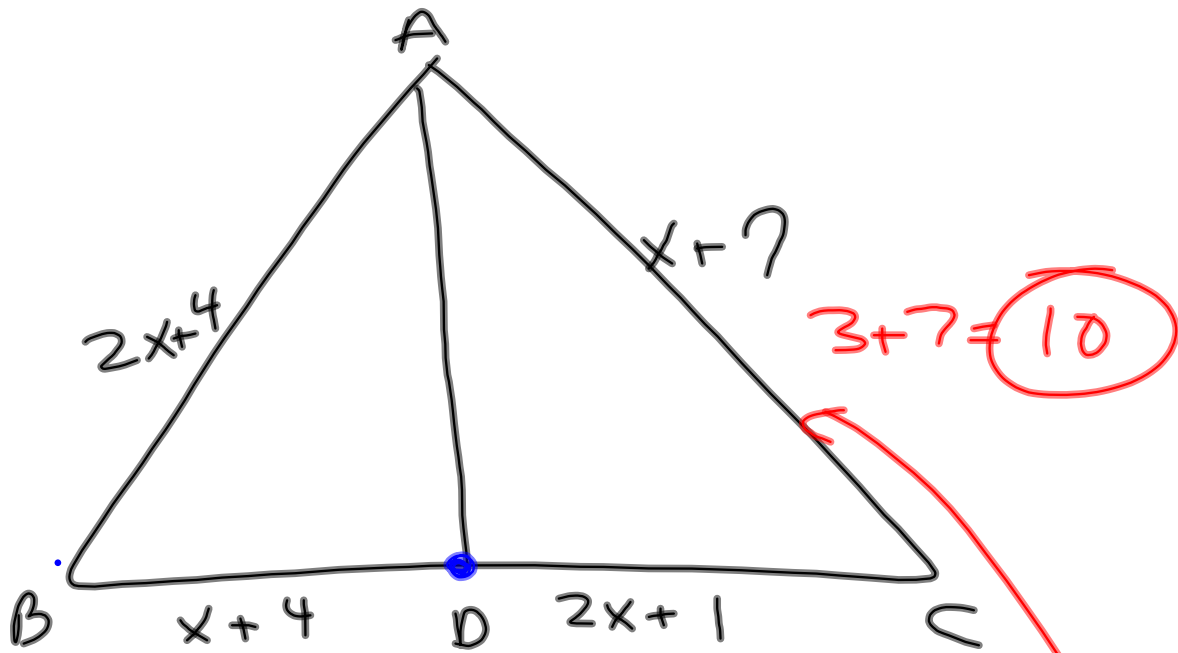
$$3x + 50 + 4x + 4x + 20 = 180$$

$$11x + 70 = 180$$

$$\underline{-70 \quad -70}$$

$$11x = 110$$

$$x = 10$$



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

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