Cornell Notes	Topic/Objective: Law of Sines	Name:
		Class/Period: 4th
		Date: 9/26/16

Essential Question: ~~(k)~~. What is the Law of Sines and when do we use it?

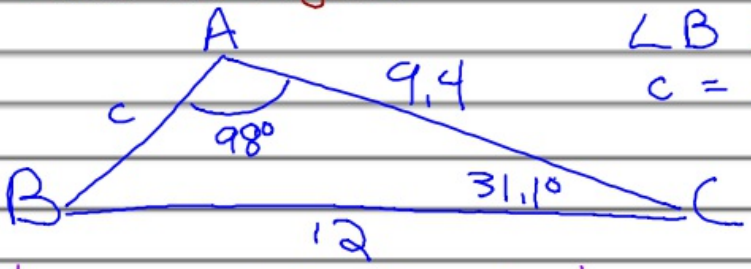
Questions:

$A = \frac{1}{2}bh$

Notes:

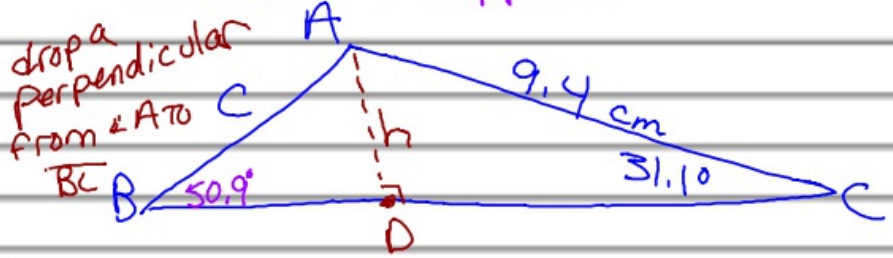
What happens if we have to find missing sides/angles for an obtuse triangle?

↑ that's not right!



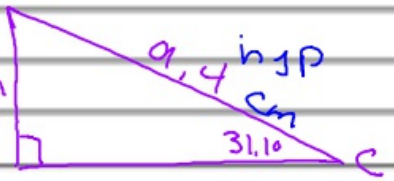
$\angle B$ ~~50.9°~~ $c =$ ____

Idea: use right triangles! (force it to happen)



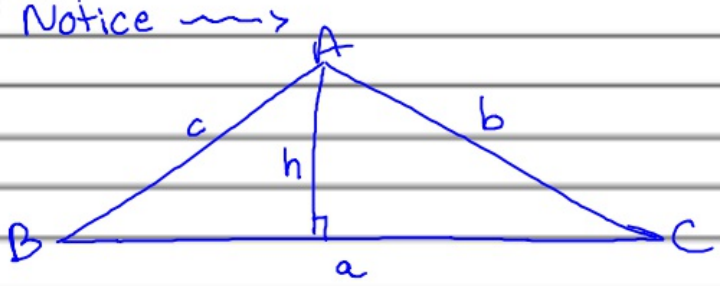
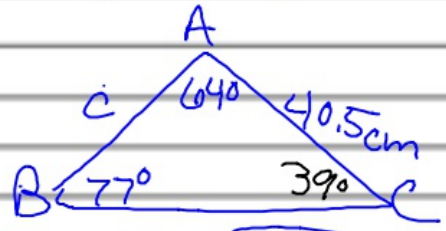
$\angle B = 180 - 31.1 - 98 = 50.9$

$\sin 31.1° = \frac{h}{9.4}$ opp



$h = 9.4 \sin 31.1°$

$h \approx 4.86$ cm

Questions:	Notes:
	Notice ~~> 
	$\sin B = \frac{h}{c}$ $\sin C = \frac{h}{b}$
	$h = c \sin B$ $h = b \sin C$
	* Transitive Property if $a=b$ and $b=c$, then $a=c$
	$\frac{c \sin B}{c} = \frac{b \sin C}{c}$
	$\frac{1}{b} \sin B = \frac{b \sin C}{c} \cdot \frac{1}{b}$
	$\frac{\sin B}{b} = \frac{\sin C}{c}$
	~~Rule~~ Sine Rule $\frac{\sin B}{b} = \frac{\sin C}{c} = \frac{\sin A}{a}$
Ex) 	$c =$ _____
p. 383 #1 a,b #4	$\frac{\sin 77}{40.5} = \frac{\sin 39°}{c}$ $\frac{c \sin 77°}{\sin 77°} = \frac{40.5 \sin 39°}{\sin 77°}$ $c \approx 24.2\text{cm}$