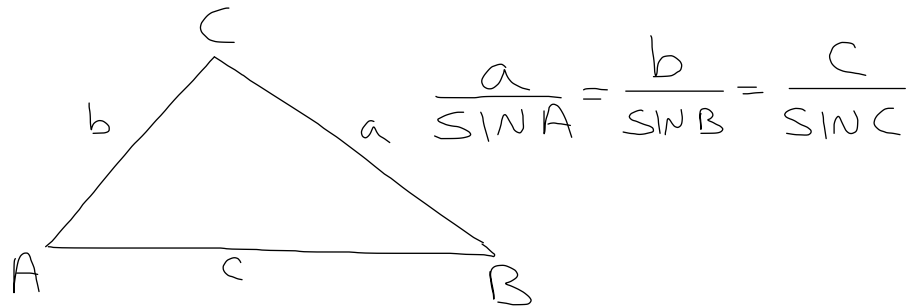
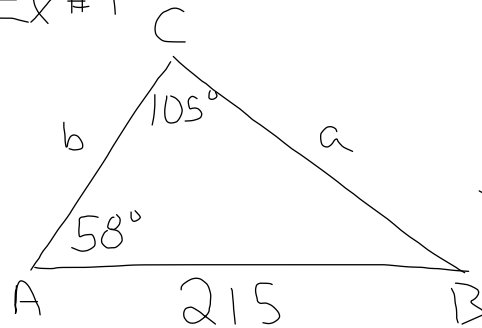


JAN 9/08

LAW OF SINES



Ex #1



$$\frac{a}{\sin A} = \frac{c}{\sin C}$$

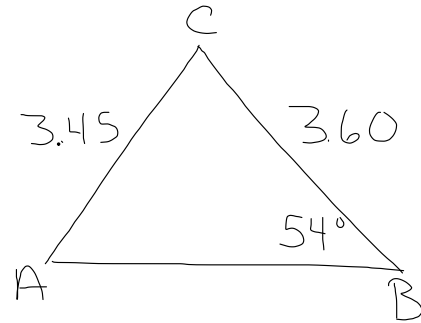
$$\frac{a}{\sin 58^\circ} = \frac{215}{\sin 105^\circ}$$

~~$$\frac{\sin 105^\circ a}{\sin 105^\circ} = \frac{215 \cdot \sin 58^\circ}{\sin 105^\circ}$$~~

$$a = \frac{215 \cdot \sin 58^\circ}{\sin 105^\circ}$$

$$a = 188.8$$

Ex # 2



WHAT IS THE
MEASURE OF
∠A?

$$\frac{a}{\sin A} = \frac{b}{\sin B}$$

$$\frac{3.60}{\sin A} = \frac{3.45}{\sin 54^\circ}$$

$$\frac{\cancel{3.45} \sin A}{\cancel{3.45}} = \frac{3.60 \cdot \sin 54^\circ}{3.45}$$

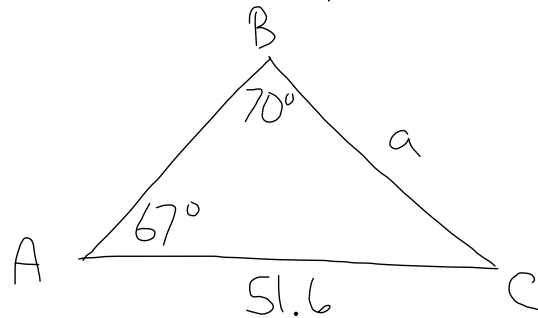
$$\sin A = \frac{3.60 \cdot \sin 54^\circ}{3.45}$$

$$\sin A = .8441916463$$

$$\angle A = \sin^{-1}(.8441916463)$$

$$\angle A = 58^\circ$$

Ex #3 Given $b = 51.6$, $\angle A = 67^\circ$
AND $\angle B = 70^\circ$ Find a



$$\frac{a}{\sin A} = \frac{b}{\sin B}$$

$$\frac{a}{\sin 67^\circ} = \frac{51.6}{\sin 70^\circ}$$

$$\frac{\cancel{\sin 70^\circ} a}{\cancel{\sin 70^\circ}} = \frac{51.6 \cdot \sin 67^\circ}{\sin 70^\circ}$$

$$a = \frac{51.6 \cdot \sin 67^\circ}{\sin 70^\circ}$$

$$a = 50.5$$