

Sine Law

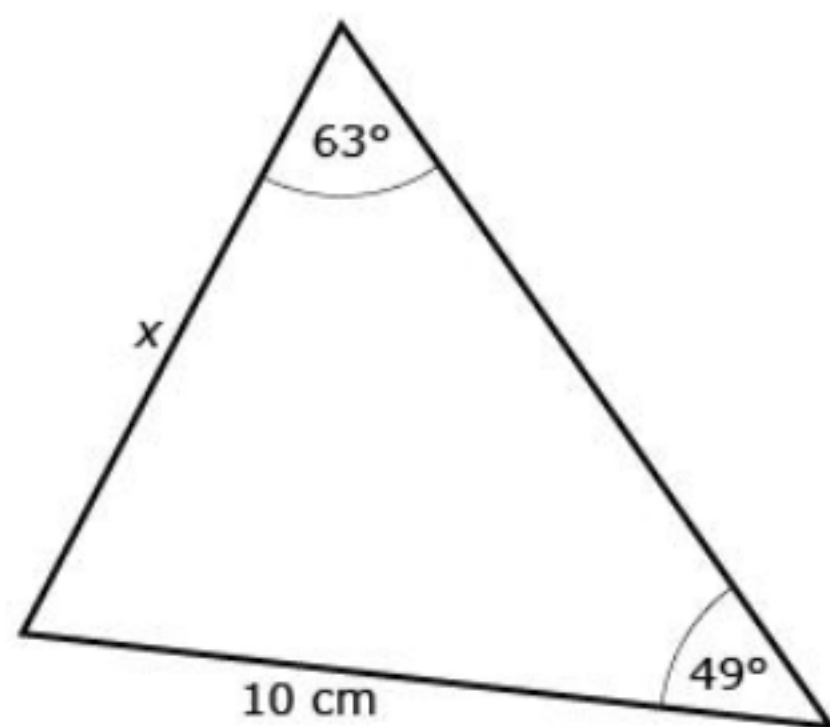
When do you use sine law?

You need a corresponding pair to use sine law

Sides

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

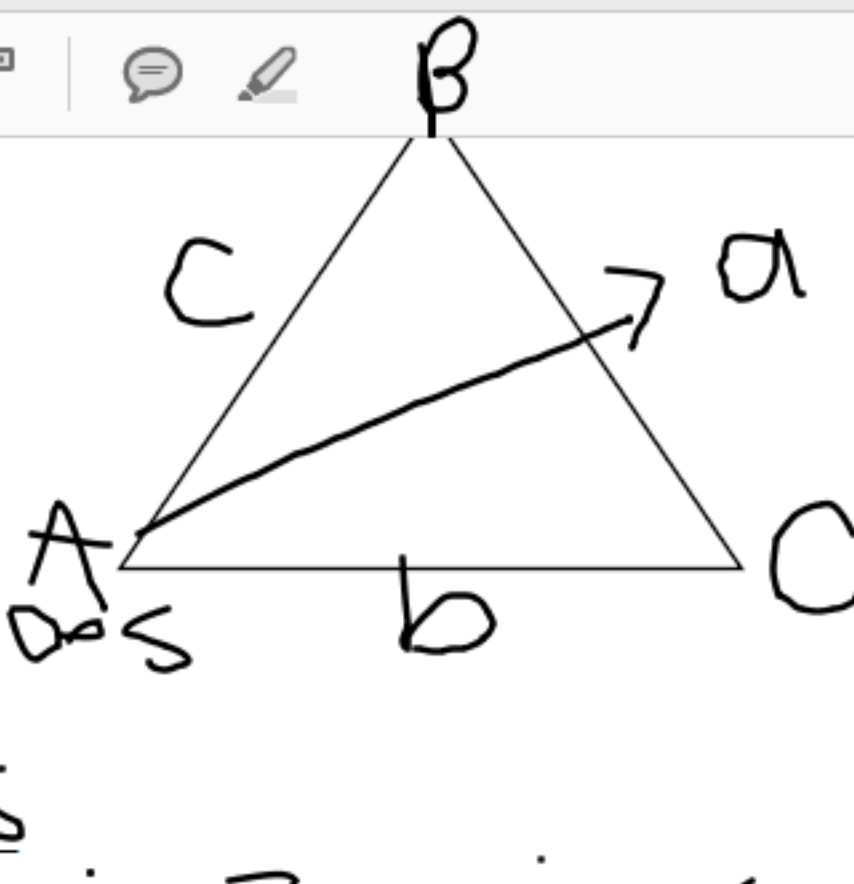
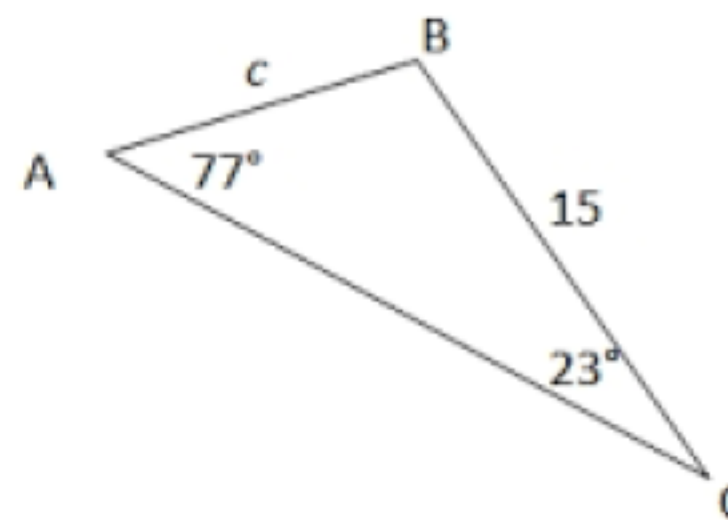
Solve for x (side)



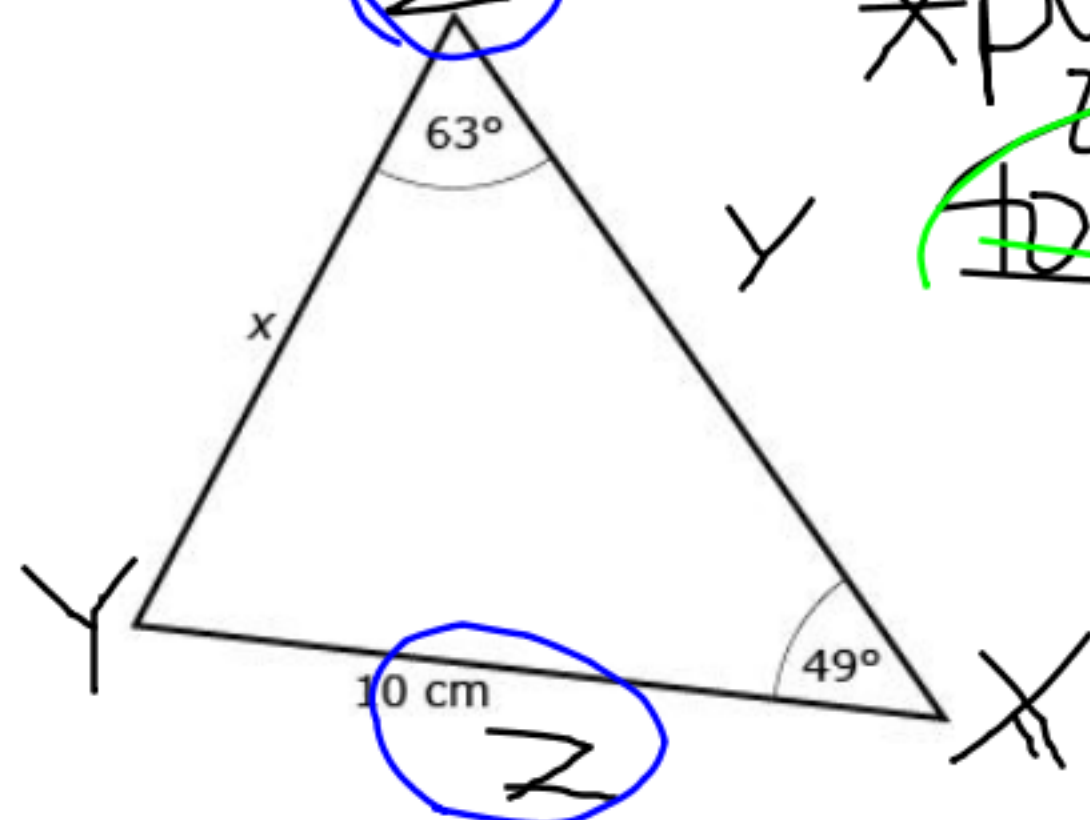
OR $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$

Solve for c (side)

1. For $\triangle ABC$ find c to the nearest hundredth.

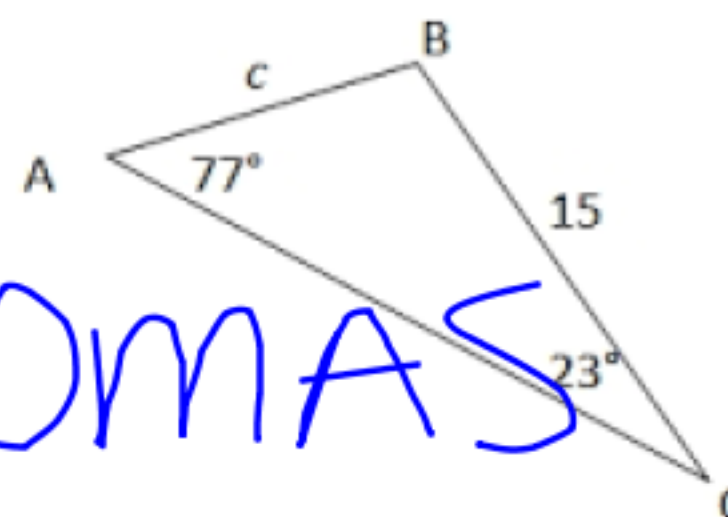


$\frac{1}{2} \times (\text{side})$
 $\frac{1}{2} \times 2$
 $\frac{1}{2} \times 2 = 1$



* put unknown
on the
top right

For $\triangle ABC$ find c to the nearest hundredth.



BEDMAS

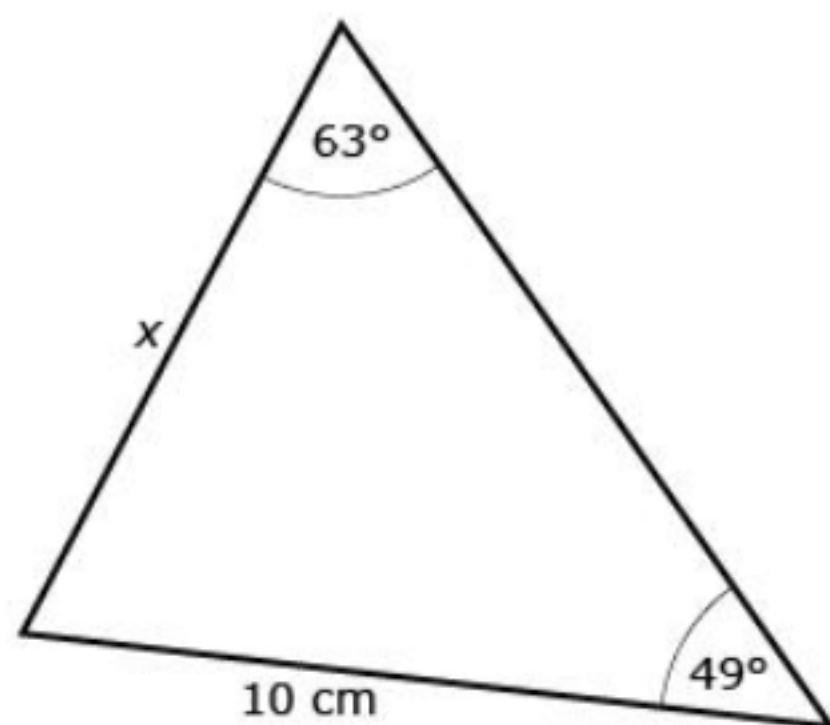
$$\frac{z}{\sin z} = \frac{x}{\sin x}$$

$$\frac{10}{\sin 63^\circ} = \frac{x}{\sin 49^\circ}$$

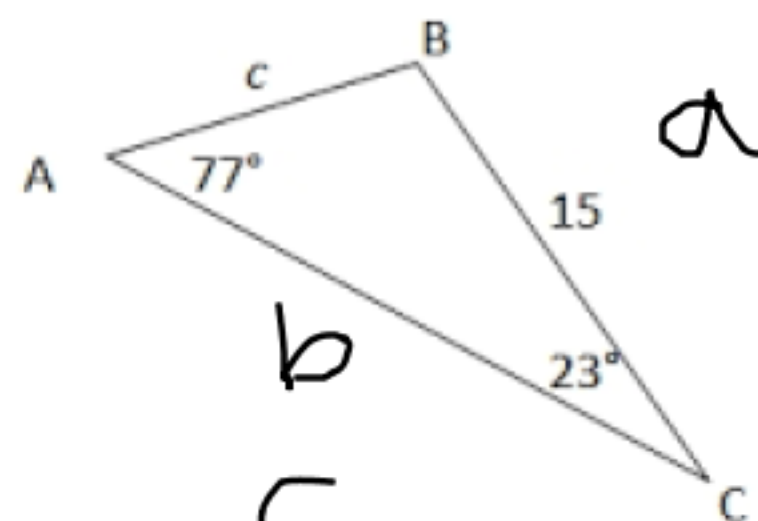
$$8.47 = \times$$

8. $5\text{cm} = x$

Solve for x (side)



Solve for c (side)

1. For $\triangle ABC$ find c to the nearest hundredth.

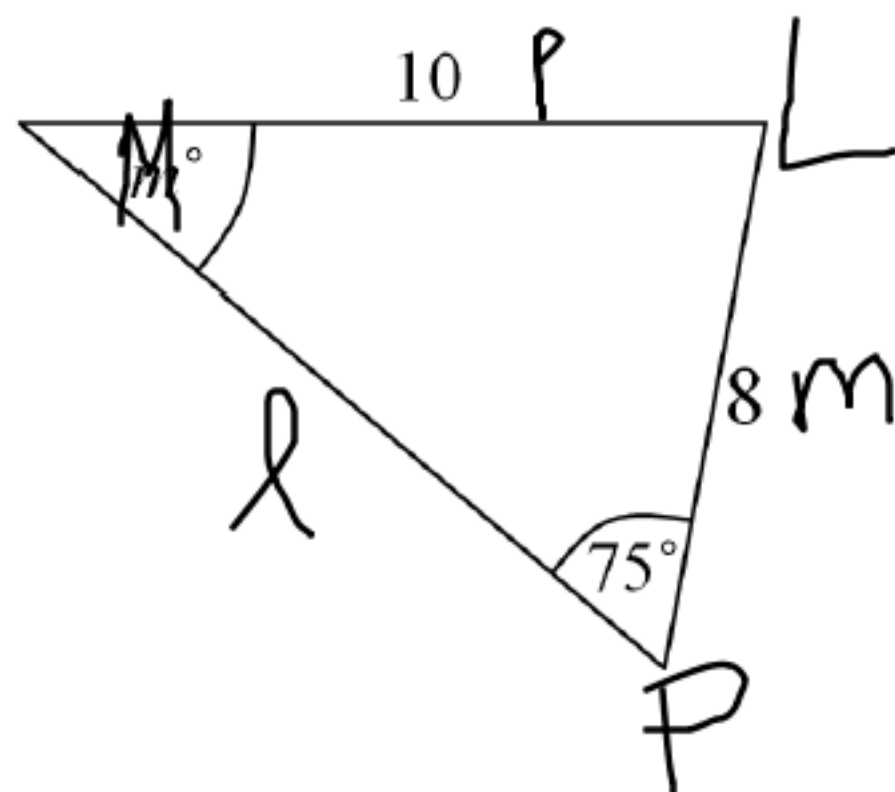
$$\textcircled{3} \sin 23^\circ \times \left(\frac{15}{\sin 77^\circ} \right) = \frac{c}{\sin 23^\circ}$$

$$6.015 = c$$

$$6.02 = c$$

units

Solve for M (angle)



$$\frac{\sin P}{p} = \frac{\sin M}{m}$$

$$\textcircled{3} \frac{\sin 75}{10} = \frac{\sin M}{8}$$

$$0.7727 = \sin M$$

$$50.59 = M$$

$$51^\circ = M$$

Solve for X (angle)

