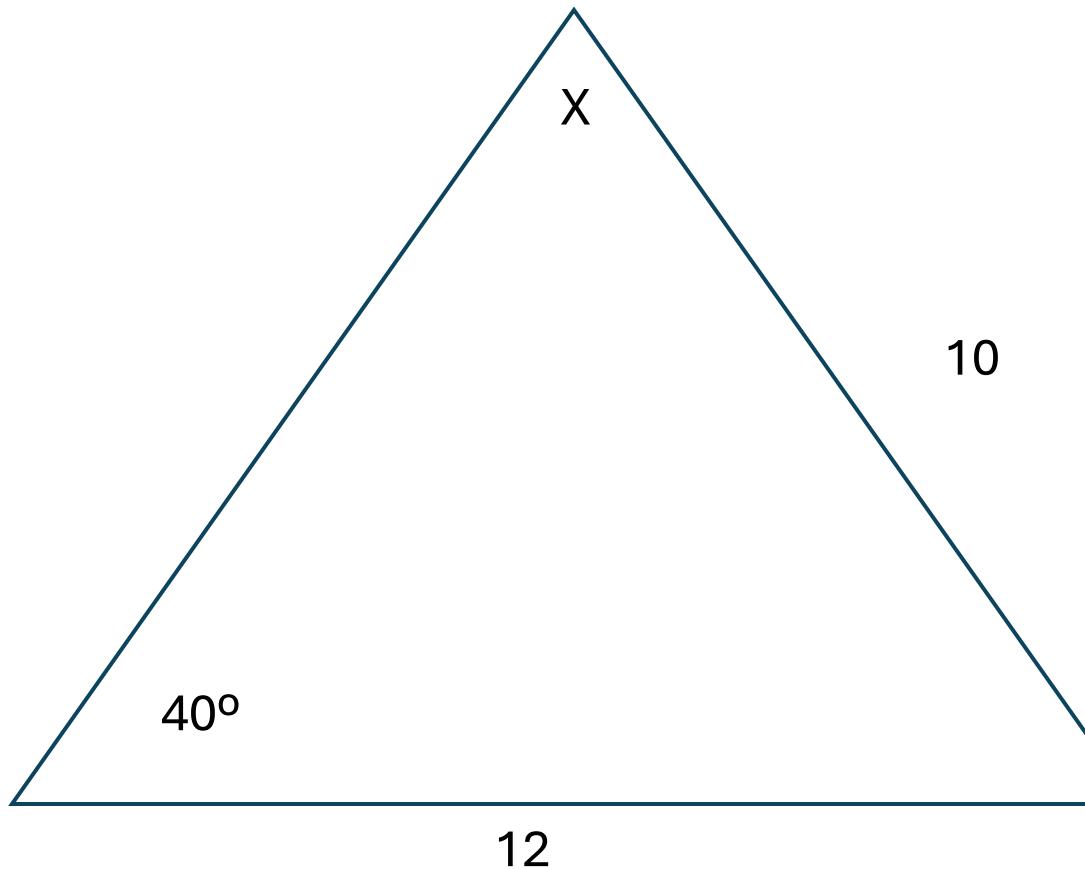


Law of Sines

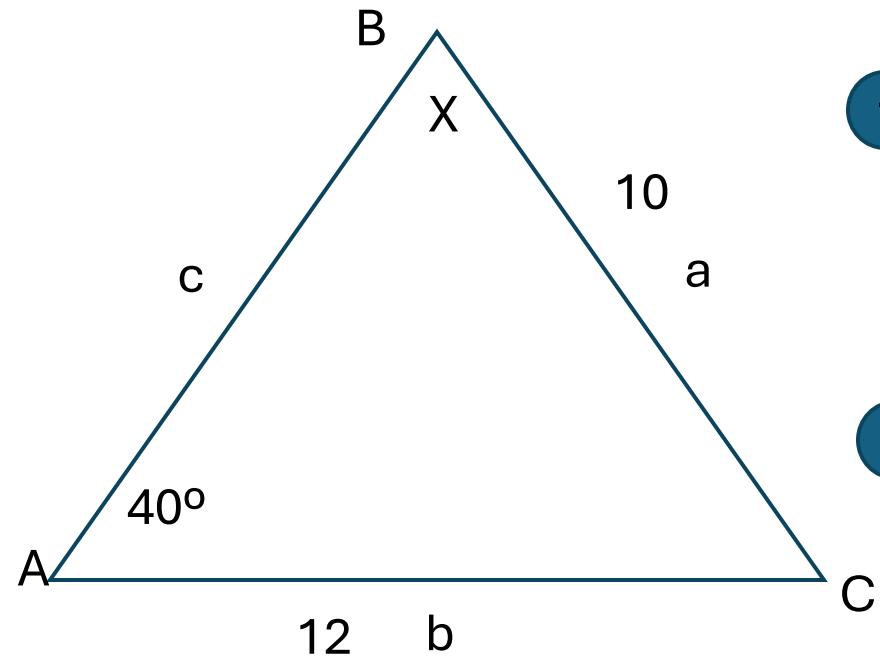
$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

Law of Sines



Step 1 – Label sides and angles
Step 2- choose what part of the formula to use
Step 3- plug in the numbers you know
Step 4- cross multiply
Step 5 – to isolate X multiply by Sin^{-1}

Law of Sines



1

$$\frac{\sin 40}{10} = \frac{\sin X}{12} = \frac{\sin C}{c}$$

3

$$\frac{12 \sin 40}{10} = \frac{10 \sin X}{10}$$

5

$$1.2 \sin 40 = \sin X$$
$$.77 = \sin X$$

$$\sin A = \sin B = \sin C$$

a

b

c

2

$$12 \sin 40 = 10 \sin X$$

4

$$1.2 \sin 40 = \sin X$$

6

$$.77 = \sin X$$
$$.77 \sin^{-1} = X$$

7

$$X = 50.35$$