

Notes from Lesson 5: Sine Rule to Find Angle

The sine rule is:

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

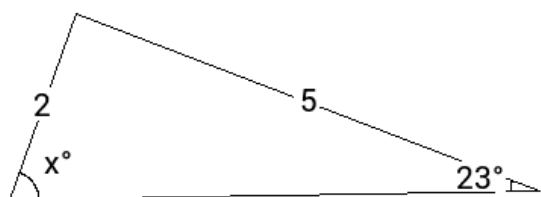
We can write that up the other way as well:

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

We could write the first two bits of this (the part without the cs) as:

$$a = \sin^{-1}\left(\frac{\sin B}{b} \times a\right)$$

Let's look at an example with numbers:



$$x = \sin^{-1}\left(\frac{\sin 23}{2} \times 5\right) = 77.6^\circ$$

Remember B is the angle that is opposite b, and a is the side opposite A (the angle we are trying to find out)