

Notes from Lesson 3: Cosine Rule to Find Angle

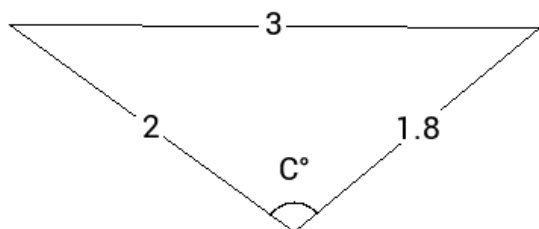
The cosine formula is: $c^2 = a^2 + b^2 - 2ab \cos(C)$

We could write this as:

$$C = \cos^{-1} \left(\frac{a^2 + b^2 - c^2}{2ab} \right)$$

This lets us find out the angle in a triangle that is opposite the side we label c.

Let's look at an example.



$$C = \cos^{-1} \left(\frac{1.8^2 + 2^2 - 3^2}{2 \times 1.8 \times 2} \right) = 104^\circ$$

Note: when doing it on the calculator don't forget to put extra brackets round the top and bottom lines of the fraction.