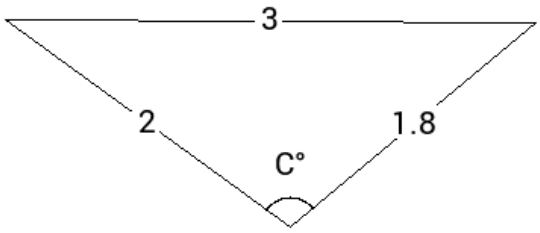
Notes from Lesson 3: Cosine Rule to Find Angle

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.



$$C = \cos^{-1}\left(\frac{1.8^2 + 2^2 - 3^2}{2\times1.8\times2}\right) = 104°$$

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