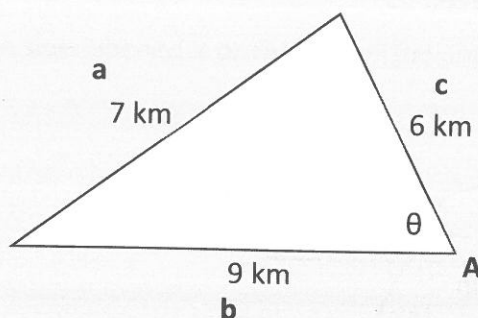


So now your triangle should look like this:



Insert your given information into the formula:

$$\cos \theta = \frac{9^2 + 6^2 - 7^2}{2(9)(6)}$$

The easiest way to find the answer from here is to calculate the top and bottom parts of your fraction separately. This gives you:

$$\cos \theta = \frac{68}{108}$$

This is not our final answer! We are looking for ' θ ', not ' $\cos \theta$ '. We need to get rid of the word 'cos', and leave the θ behind. We do this by using inverse cos. (You did this on your calculator when finding an angle using *sine law* – do the same thing here but with the cos button). On your calculator, type 2nd, cos, 68 ÷ 108 and then press =. (Some calculators take the fraction first: 68 ÷ 108 = then 2nd cos). Make sure to ask your online teacher if you can't get the correct answer on YOUR calculator. You end up with:

$$\theta = 50.98^\circ$$

(note that your answer is ' $\theta =$ ', and NOT ' $\cos \theta =$ ')