

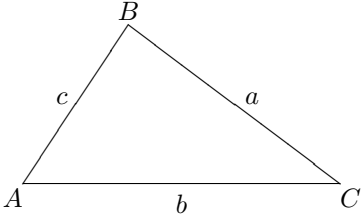
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## MATH 11022: Law of Cosines

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THE LAW OF COSINES

For *any* triangle,

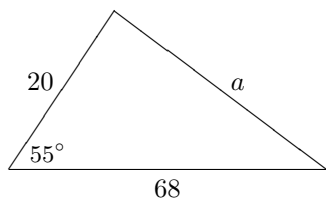

$$a^2 = b^2 + c^2 - 2bc \cos A$$

OR

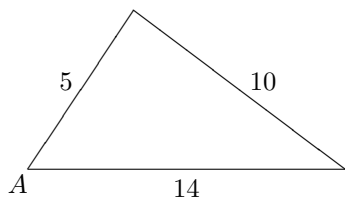
$$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$$

**Example 1:** Solve for the variable. Give answer to two decimal places. Note that all figures are not drawn to scale.

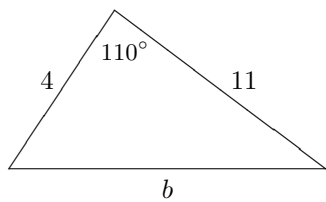
(a)



(b)



(c)



(d)

