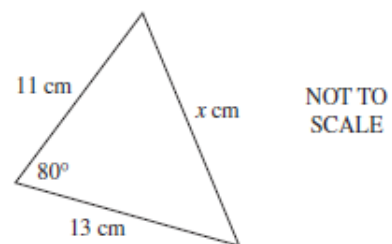




MA **12**
SP **Band**
2-4

The diagram shows a triangle with sides of length x cm, 11 cm and 13 cm and an angle of 80° .

Use the cosine rule to calculate the value of x , correct to two significant figures.

**3**

$$\begin{aligned}x^2 &= 11^2 + 13^2 - 2(11)(13)\cos 80^\circ \\ &= 240.3366212\dots \\ x &= 15.50279398\dots \\ &= 16 \text{ (2 sig figs)}\end{aligned}$$

* These solutions have been provided by [projectmaths](http://projectmaths.com.au) and are not supplied or endorsed by NESA.

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