

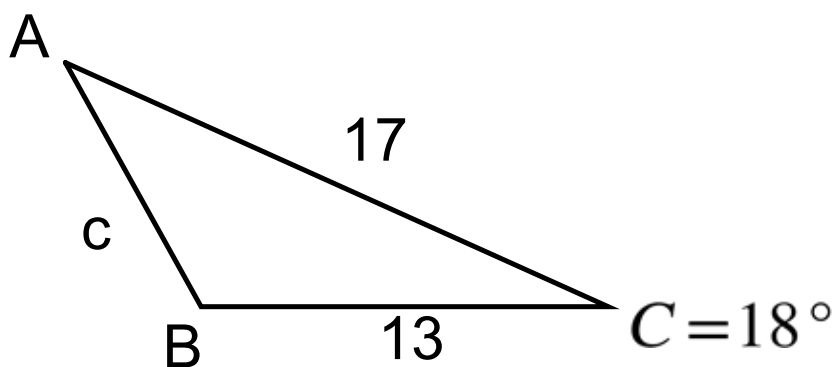
## 7-3 Law of Cosines

Objective:

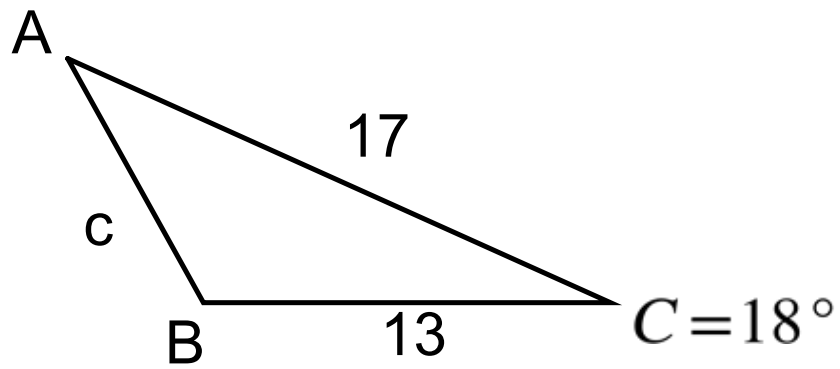
7-3a: I can solve a triangle using the Law of Cosines.

How do we solve a triangle like this...

What do we know?



Solve the triangle.

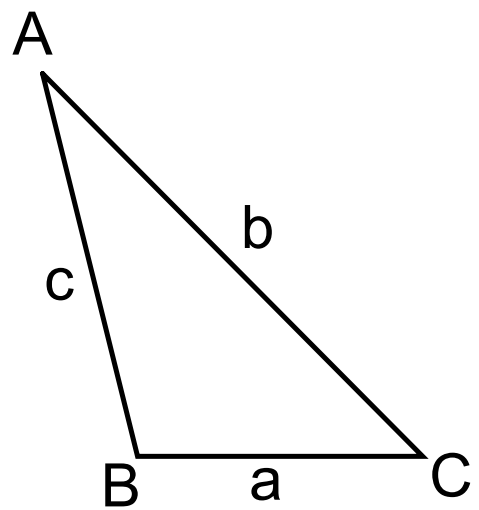


## Law of Cosines

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

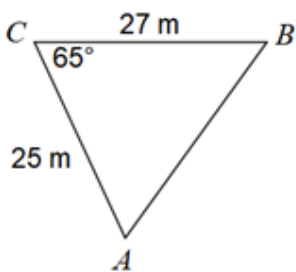
$$b^2 = a^2 + c^2 - 2ac \cos B$$

$$c^2 = a^2 + b^2 - 2ab \cos C$$



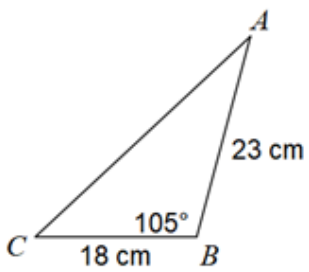
Find each measurement indicated. Round your answers to the nearest tenth.

1) Find AB

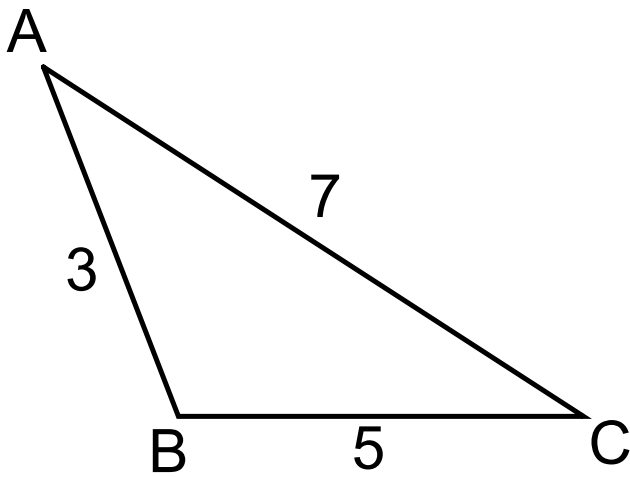


Find each measurement indicated. Round your answers to the nearest tenth.

3) Find AC

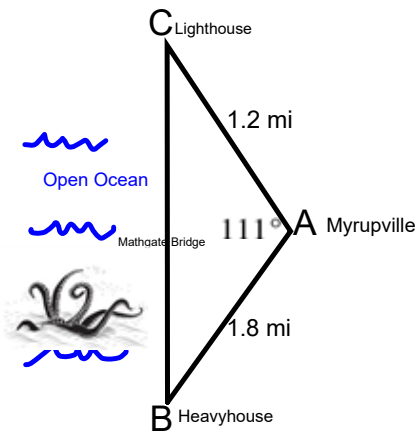


Solve the triangle



### 7-3 Law of Cosines.notebook

The people of Myrupville need to build a bridge across Myrupville Bay. They plan to have it go from the Lighthouse on one side of the bay to the Heavyhouse on the other side of the bay. **How long does the Mathgate Bridge need to be?** **What angles do the "Houses" make with Myrupville?**





## Attachments

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HW 7-2 Law of Sines.pdf