

Quiz: Sine Law and Cosine Law**Marks**

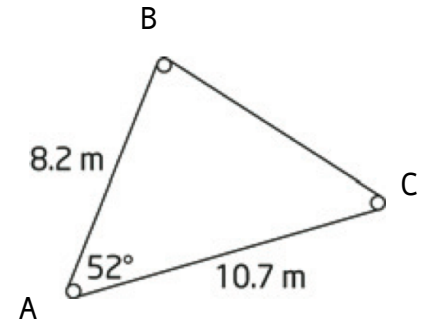
TIP: Write the formula, then substitute, to reduce potential for errors.

/ 15

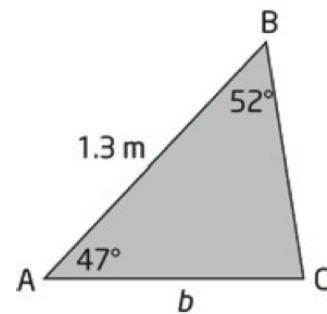
1. A fence is constructed around three posts, as shown.

Find the total length of the fence, to the nearest tenth of a metre.

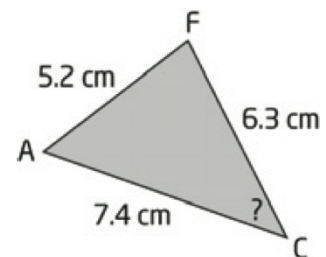
NOTE: You may ignore the curved sections at the vertices.

**K 4**

2. Find the measure of side b , to the nearest tenth of a metre.

**K 3**

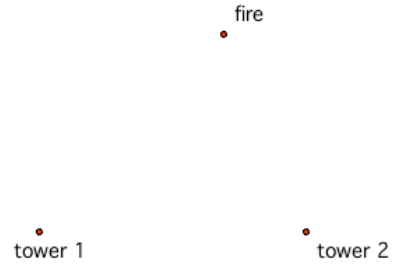
3. Find the measure of $\angle C$ to the nearest whole degree.

**K 3**

Marks

3. In large national parks, fire towers are used to spot forest fires. Park employees are in two fire towers that are 3.4 km apart, horizontally. A fire is spotted. From the first tower, the fire is spotted at an angle of 53° to the horizontal. From the second tower, the fire is spotted at an angle of 65° to the horizontal. Which tower is closer to the fire?

Justify your answer using mathematics – then explain, using a concluding sentence, why your answer is correct.

**A 5**