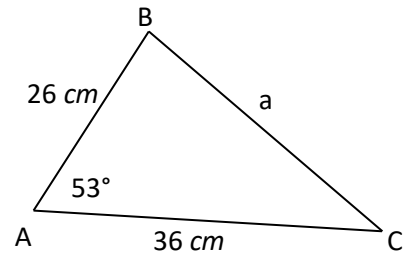
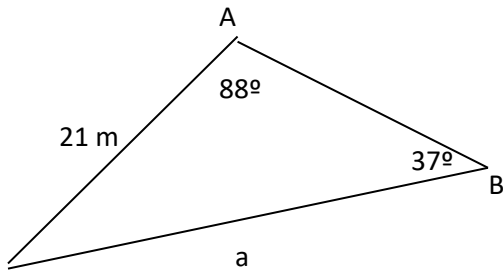


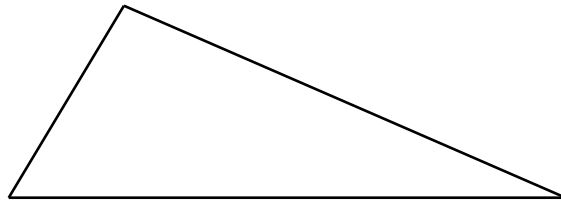
The Cosine Law

Warm-up

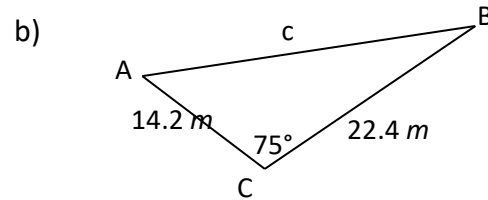
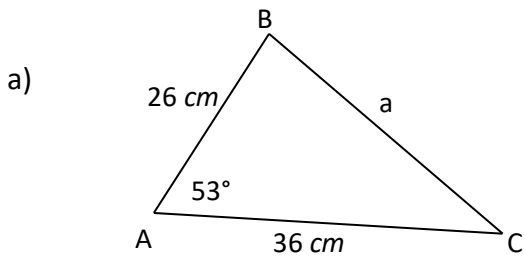
Solve for the indicated side in each triangle below.



We will now introduce the cosine law.



Use the Cosine Law to solve for the indicated sides in the triangles below.



Suppose two hikers leave from the same spot at the same time. The first hiker heads on a bearing of 36° , at a speed of 5 km/h. The second hiker leaves on a bearing of 264° at a speed of 6 km/h.

Find the distance between the two hikers after 2.5 hours.

We can also use the cosine law to solve for an angle when we have all 3 sides.

