

PC11

The Law of Cosines – Cosine Law

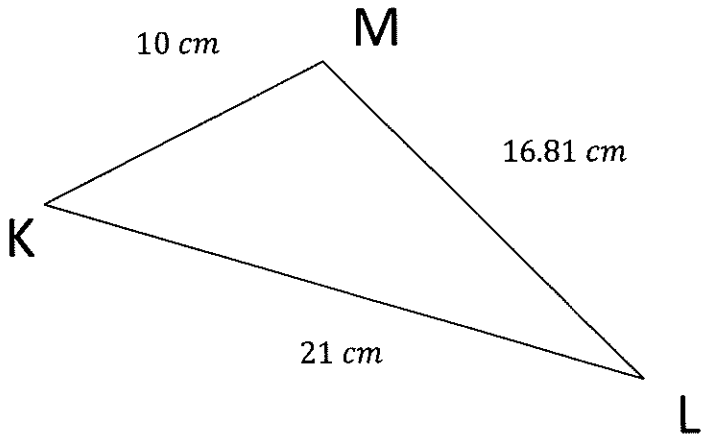
Cosine Law is a rule that can be used to find unknown angles and unknown side lengths in any triangle provided 3 pieces of information are known. However, do not use the Cosine law for right-angled triangles; use SOH-CAH-TOA for right-angled triangles.

Apply the Cosine Law when:

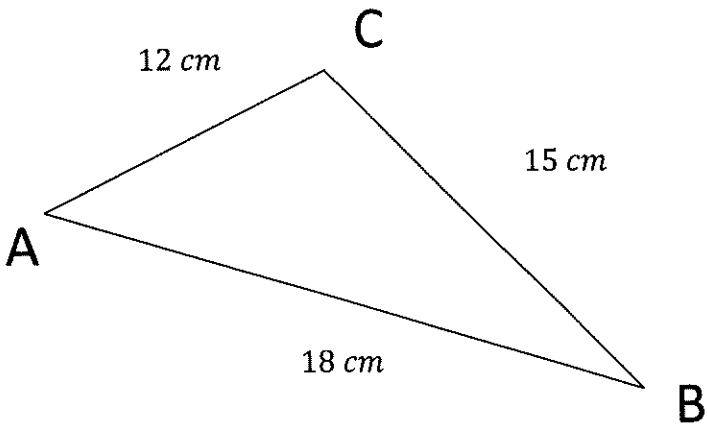
- 3 side lengths are known.
- 2 side lengths and 1 angle are known and the angle is not opposite of the known side.

Isolating for the angle measure:

Ex.1: Solve the triangle KLM.



Ex.2: Find all interior angles in $\triangle ABC$



Ex.3: Determine the length of \overline{SU} .

