

Angle-Side-Angle (ASA) Triangle Construction

For the ASA criterion to be satisfied, the given side must necessarily be the one that is enclosed by the known angles.

⇒ **Let us understand with an Example:**

Example: Construct a triangle, ABC, the measures of the angles are $\angle CAB = 45^\circ$ degrees and $\angle ABC = 60^\circ$ degrees. The length of side AB = 3 cm.

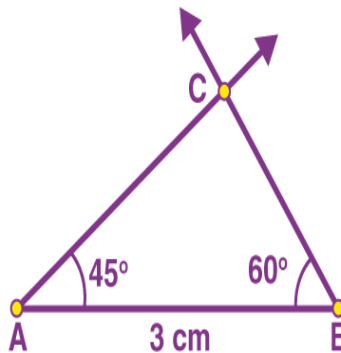
⇒ **Solution:** The steps for its construction are as follows:

Step 1: Using the ruler, construct a line segment AB of length 3 cm.

Step 2: Using the protractor, draw a ray at point B making 60 degrees with the line BA.

Step 3: Similarly, draw a ray at point A making 45 degrees with the line AB using the protractor.

Step 4: Mark the point where the two rays meet as C.



Thus, you obtain a triangle ABC of the required measurements.