HW
01/11/21

Ex → 15 (A)

1. State, if the triangles are possible with the following angles:

(i) 20°, 70° and 90° → Yes

(ii) 40°, 130° and 20° → NO

(iii) 80°, 80° and 50° → NO

(iv) 125°, 40° and 15° → Yes

2. If the angles of a triangle are equal, find its angles?

Ans → The Angles of a triangle are equal.

Lets assume the angle is x

Total angle $= 3x = 180^\circ$

$$\Rightarrow x = \frac{180}{3}60^\circ = 60^\circ$$

∴ Hence, each angle of a triangle is 60° each.

3. In a triangle ABC, $\angle A = 45^\circ$ and $\angle B = 75^\circ$, Find $\angle C$.

Ans → Triangle ΔABC; $\angle A = 45^\circ$ and $\angle B = 75^\circ$.

∴ $\angle C = \angle A + \angle B \Rightarrow \angle C = 45^\circ + 75^\circ = 120^\circ$

$\Rightarrow 180^\circ - 120^\circ = 60^\circ$

Hence $\angle C = 60^\circ$