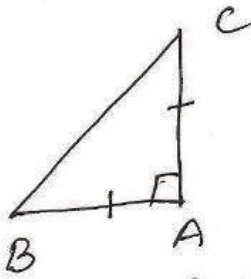


ex 7.2

NCERT Page 6

⑦



to find $\angle B, \angle C$

Sol In $\triangle ABC$

$$AB = AC$$

$$\Rightarrow \angle C = \angle B \quad (\text{isos } \triangle \text{ prop})$$

$$\angle A + \angle B + \angle C = 180^\circ \quad (\text{angle sum prop of } \triangle)$$

$$90^\circ + \angle B + \angle B = 180^\circ \quad (\because \angle B = \angle C)$$

$$\Rightarrow 2\angle B = 90^\circ$$

$$\Rightarrow \angle B = 45^\circ$$

$$\therefore \angle B = \angle C = 45^\circ$$

From ①, ②

$$\angle A = \angle B = \angle C \quad \dots \text{ ③}$$

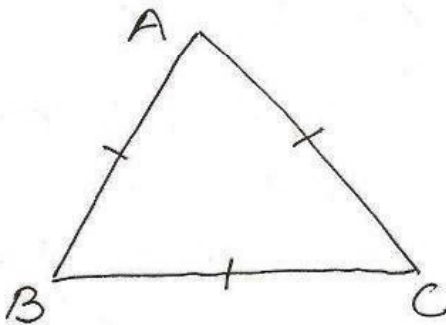
$$\angle A + \angle B + \angle C = 180^\circ$$

$$3\angle A = 180^\circ \quad (\text{use ③})$$

$$\Rightarrow \angle A = 60^\circ$$

$$\therefore \angle A = \angle B = \angle C = 60^\circ$$

⑧



To Prove $\angle A = \angle B = \angle C = 60^\circ$

Proof In $\triangle ABC$

$$AB = AC$$

$$\angle C = \angle B \quad \dots \text{ ①}$$

[isos \triangle prop]

$$AB = BC$$

$$\angle C = \angle A \quad \dots \text{ ② (do)}$$