

Ans- Given :- BE & CF are equal altitude

To prove :- $\triangle ABC$ is isosceles

Proof :- In $\triangle BEC$ & $\triangle CFB$
 $\angle BEC = \angle CFB$ (90°)
 $BC = CB$ (Common)
 $BE = CF$ (Given)

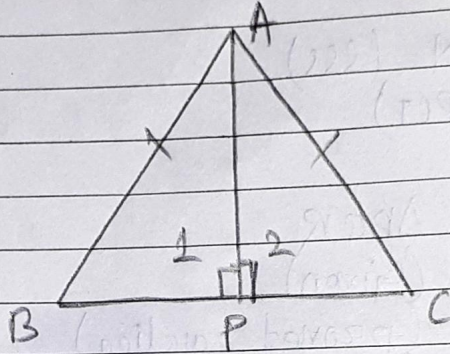
∴ $\triangle BEC \cong \triangle CFB$ (RHS)

$\angle B = \angle C$ (CPCT)

$AC = AB$ (sides opposite to equal angle).

∴ $\triangle ABC$ is an isosceles. (proved)

5.



Ans. Given:- $AB = AC$

To prove:- $\angle B = \angle C$

Proof:- In $\triangle ABP$ & $\triangle APC$

$AB = AC$ (Given)

$AP = PA$ (common)

$\angle 1 = \angle 2$ (90°)

∴ $\triangle ABP \cong \triangle APC$ (RHS)

$\angle B = \angle C$ (CPCT)