



Exercise 4D

Question 4:

$$\angle A + \angle B = 108^\circ \text{ [Given]}$$

But as $\angle A$, $\angle B$ and $\angle C$ are the angles of a triangle,

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

$$\Rightarrow 108^\circ + \angle C = 180^\circ$$

$$\Rightarrow \angle C = 180^\circ - 108^\circ = 72^\circ$$

Also, $\angle B + \angle C = 130^\circ$ [Given]

$$\Rightarrow \angle B + 72^\circ = 130^\circ$$

$$\Rightarrow \angle B = 130^\circ - 72^\circ = 58^\circ$$

Now as, $\angle A + \angle B = 108^\circ$

$$\Rightarrow \angle A + 58^\circ = 108^\circ$$

$$\Rightarrow \angle A = 108^\circ - 58^\circ = 50^\circ$$

$\therefore \angle A = 50^\circ$, $\angle B = 58^\circ$ and $\angle C = 72^\circ$.

Question 5:

Since, $\angle A$, $\angle B$ and $\angle C$ are the angles of a triangle .

$$\text{So, } \angle A + \angle B + \angle C = 180^\circ$$

Now, $\angle A + \angle B = 125^\circ$ [Given]

$$\therefore 125^\circ + \angle C = 180^\circ$$

$$\Rightarrow \angle C = 180^\circ - 125^\circ = 55^\circ$$

Also, $\angle A + \angle C = 113^\circ$ [Given]

$$\Rightarrow \angle A + 55^\circ = 113^\circ$$

$$\Rightarrow \angle A = 113^\circ - 55^\circ = 58^\circ$$

Now as $\angle A + \angle B = 125^\circ$

$$\Rightarrow 58^\circ + \angle B = 125^\circ$$

$$\Rightarrow \angle B = 125^\circ - 58^\circ = 67^\circ$$

$\therefore \angle A = 58^\circ$, $\angle B = 67^\circ$ and $\angle C = 55^\circ$.

***** END *****