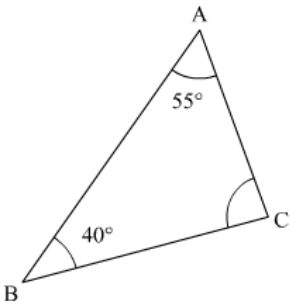
Triangles and Its Angles Ex 9.1 Q1

Answer :



$\angle A+\angle B+\angle C=180^{\circ}$ [The sum of three angles of a triangle is 180°.]

$\Rightarrow 55^{\circ}+40^{\circ}+\angle C=180^{\circ}$

$\Rightarrow 95^{\circ}+\angle C=180^{\circ}$

$\Rightarrow \angle C=180^{\circ}-95^{\circ}$

$\Rightarrow \angle C=85^{\circ}$

Triangles and Its Angles Ex 9.1 Q2

Answer :

Let the angles of the given triangle be of $x°$, $2x°$ and $3x°$. Then,

∴ x+2x+3x=180 The sum of three angles of a triangle is 180°⇒6x=180⇒x=30

Hence, the angles of the triangle are 30°, 60° and 90°.

Triangles and Its Angles Ex 9.1 Q3

Answer :

Given angles are $(x-40)^{\circ}$, $(x-20)^{\circ}$ and $\left(\frac{1}{2}x-10\right)^{\circ}$.

∴ x-40+x-20+12x-10=180⇒52x=180+70⇒52x=250⇒x=250×25⇒x=100

Hence, the value of x is 100°.

********** END **********