



Properties of Triangles Ex 15.2 Q1

**Answer :**

Let the third angle be  $x$ .

Sum of all the three angles of a triangle  $= 180^\circ$

$$\therefore 105^\circ + 30^\circ + x = 180^\circ$$

$$\text{or, } x = 180^\circ - 135^\circ$$

$$\therefore x = 45^\circ$$

The third angle is  $45^\circ$ .

Properties of Triangles Ex 15.2 Q2

**Answer :**

Let the other two angles be  $x$ .

Sum of all the three angles of a triangle  $= 180^\circ$

$$\text{i.e. } 130^\circ + x + x = 180^\circ$$

$$\Rightarrow 2x = 180^\circ - 130^\circ$$

$$\Rightarrow 2x = 50^\circ$$

$$\Rightarrow x = \frac{50^\circ}{2}$$

$$\Rightarrow x = 25^\circ$$

Therefore, the other two angles are  $25^\circ$  each.

Properties of Triangles Ex 15.2 Q3

**Answer :**

Let each angle of the triangle be  $x$ .

Sum of all the three angles of a triangle  $= 180^\circ$

$$\text{i.e. } x + x + x = 180^\circ$$

$$\Rightarrow 3x = 180^\circ$$

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

$$\Rightarrow x = 60^\circ$$

Therefore, each angle is equal to  $60^\circ$ .

\*\*\*\*\* END \*\*\*\*\*