

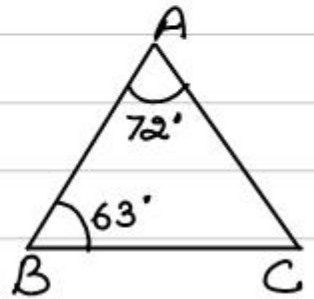
1. Sol

In $\triangle ABC$

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

$$72 + 63 + \angle C = 180^\circ$$

$$\Rightarrow \angle C = 180 - 135 \\ = 45^\circ$$



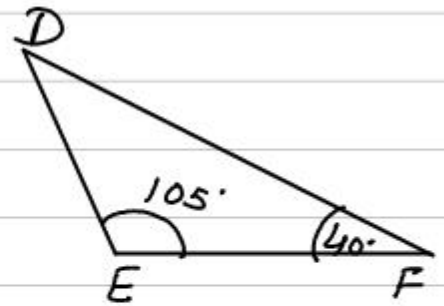
2. In $\triangle DEF$

$$\angle D + \angle E + \angle F = 180^\circ \quad (\text{angle sum prop. of } \triangle)$$

$$\angle D + 105 + 40 = 180^\circ$$

$$\Rightarrow \angle D = 180 - 145$$

$$\Rightarrow \angle D = 35^\circ$$

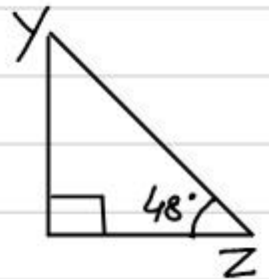


3. In $\triangle XYZ$

$$\angle X + \angle Y + \angle Z = 180^\circ \quad (\text{angle sum prop. of } \triangle)$$

$$90^\circ + \angle Y + 48^\circ = 180^\circ$$

$$\Rightarrow \angle Y = 180 - 138 \\ = 42^\circ$$



4. let the angles be $4x^\circ$, $3x^\circ$, $2x^\circ$

$$4x + 3x + 2x = 180^\circ \quad (\text{angle sum prop. of } \triangle)$$

$$\Rightarrow 9x = 180^\circ$$

$$\Rightarrow x = \frac{180}{9} = 20^\circ$$

$$\therefore \text{angles are } 4x = 4 \times 20 = 80^\circ$$

$$3x = 3 \times 20 = 60^\circ$$

$$2x = 2 \times 20 = 40^\circ$$