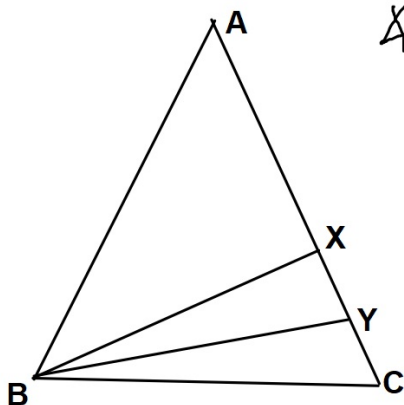




$$\angle BYC = 96^\circ. \quad AB = AC$$

$$AX = BX = BY$$

$$\angle YBC = ?$$

$$\angle BYC = 96^\circ \Rightarrow \angle BYX = 84^\circ \text{ (смежные)}$$

$$BY = BX \Rightarrow \angle BXY = \angle BXY = 84^\circ$$

$$BX = AX \Rightarrow \triangle AXB \text{ равнобедренный}$$

$$\Rightarrow \angle XAB = \angle XBA = \frac{180^\circ - \angle BXA}{2}$$

$$\angle BXA = 180^\circ - \angle BXY = 180^\circ - 84^\circ = 96^\circ$$

$$\Rightarrow \angle XAB = \angle XBA = \frac{180^\circ - 96^\circ}{2} = 42^\circ$$

$$AB = AC \Rightarrow \angle C = \angle B = \frac{180^\circ - 42^\circ}{2} = 138 : 2 = 69^\circ$$

$$\triangle BYC: \angle YBC = 180^\circ - \angle C - \angle BYC = 180^\circ - 69^\circ - 96^\circ = 15^\circ$$