

11 cont

$$x = \frac{10}{3}$$

Similarly $BE = \frac{10}{3}$

$$AB = AE + BE$$

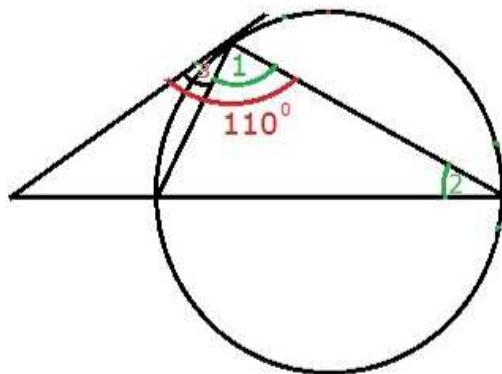
$$= \frac{10}{3} + \frac{10}{3}$$

$$= \frac{20}{3}$$

$$= 6.67 \text{ cm}$$

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given - In figure $\angle PCA = 110^\circ$

to find - $\angle CBA$

Sol. - $\angle PCA = 110^\circ$

$$\angle 1 + \angle 3 = 110^\circ$$

$$\angle 3 = 110 - 90$$

$$= 20^\circ$$

$$\angle 2 = \angle 3 = 20^\circ$$

[$\angle 1 = 90^\circ$, angle in semi \odot]

[angles in alternate segment]

In $\triangle BCA$

$$\angle 1 + \angle 2 + \angle 4 = 180^\circ \quad (\text{angle sum prop. of } \triangle)$$

$$90^\circ + 20^\circ + \angle 4 = 180^\circ$$

$$\Rightarrow \angle 4 = 180^\circ - 110^\circ$$

$$\Rightarrow \angle CBA = 70^\circ$$

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