

Class VII, ex 15 B, Page 1

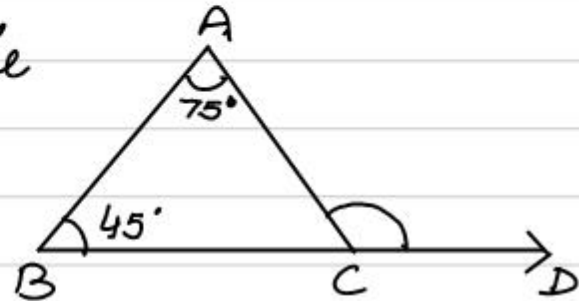
Solutions by Dev Anoop

1. to find $\angle ACD$

Sol

$\angle ACD$ is exterior angle
of $\triangle ABC$

$$\begin{aligned}\angle ACD &= \angle A + \angle B \\ &= 75^\circ + 45^\circ \\ &= 120^\circ\end{aligned}$$



2. to find x°, y°

Sol. $\angle ACD$ is exterior angle
of $\triangle ABC$

$$\begin{aligned}\therefore \angle ACD &= \angle A + \angle B \\ 130^\circ &= x^\circ + 68^\circ\end{aligned}$$

$$\Rightarrow 130 - 68 = x$$

$$\Rightarrow x^\circ = 62^\circ$$

$$\angle ACD + \angle 1 = 180^\circ \quad (\text{linear pair})$$

$$130^\circ + y^\circ = 180$$

$$\begin{aligned}\Rightarrow y &= 180 - 130 \\ &= 50\end{aligned}$$

$$\therefore x = 62, y = 50$$

