

Case i: derive the region codes of P_1, P_2

region code of $P_1 = TBRL$ - Top Bottom RL

$$= 0001$$

region code of $P_2 = 1000$

$$P_1 - 0001 \quad N2$$

$$P_2 - 1000 \quad N2$$

$$AND = 0000 \quad Z$$

Since logical AND result is 0000 this

P_1, P_2 may be partially visible. It indicates

P_1 and P_2 some portion is inside and some outside.

Clipping is required

Slope line P_1, P_2

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{90 - 30}{80 - 10}$$

$$= \frac{60}{70} = 0.87$$

\therefore slope b/w P_1 and intersection point will be

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

where x_1, y_1 are related with P_1, x_2 is known i.e. 20 y_2 we have to find

$$\therefore m(x_2 - y_1) = y_2 - y_1$$

$$\begin{aligned} \therefore y_2 &= m(x_2 - x_1) + y_1 \\ &= 0.8(20 - 10) + 30 \\ &= \underline{\underline{38}} \end{aligned}$$

\therefore The intersection point is (20, 38).

Since it is exactly at the boundary, its region code will be (0, 0, 0, 0).

Now we have to discard the line P, P is outside window.

Similarly we have to find another intersection point i_2 with respect to top boundary

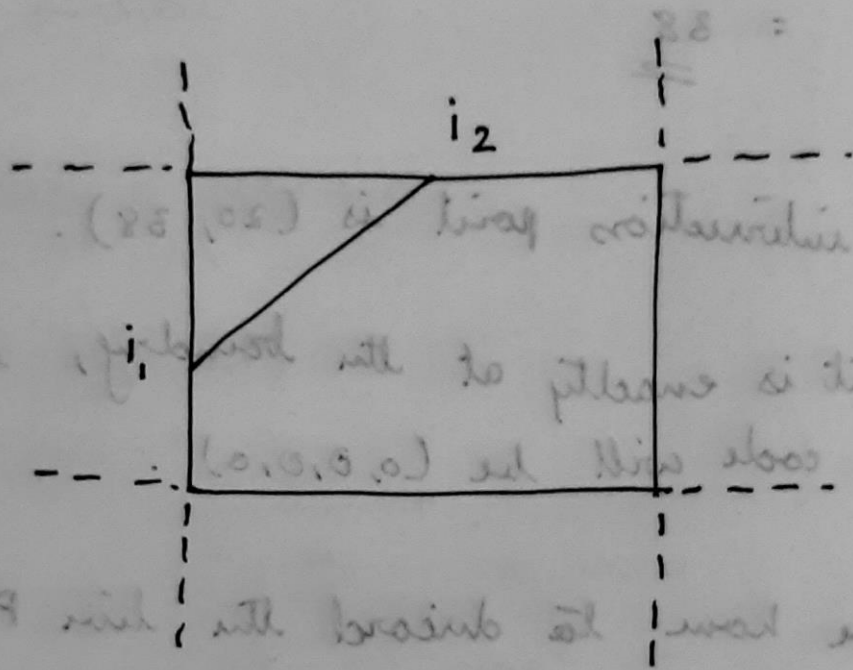
i_2 TBRL will be (0, 0, 0, 0)

$$i_1 \quad - \quad 0 \ 0 \ 0 \ 0 \quad 2$$

$$i_2 \quad - \quad 0 \ 0 \ 0 \ 0 \quad 2$$

$$\text{AND} \quad \underline{\underline{0 \ 0 \ 0 \ 0}}$$

Accept the line i_1 and i_2 , which
 is completely within and we display it.



Similarly we have to find another interval
 point is with respect to top boundary
 is (0, 0) will be (0, 0, 0)