Cohen Sutherland

$(x_{wmin}, x_{wmax}) = (10, 150)$

$(y_{wmin}, y_{wmax}) = (10, 100)$

$P_0 = (0, 120)$

$P_1 = (130, 5)$

A: $P_0 : 1001$ $P_1 = 0100$

T. Accept: $1001 + 0100 = 1101$ not accept

$m = \frac{120-5}{-130} = -\frac{115}{130} = -0.88$

T. Reject & = $1001 \cdot 0100 = 0000$ not reject

Take P_0. :

intersection with Top $y = 100$

$x = x_1 + (y - y_1)/m$

$= 0 + (-20)/(-0.88)$

$= 22.72$

$(22.72, 100) : 0000$

T. Accept : $0000 + 0100 = 0100$ not accept

T. Reject = $0000 \cdot 0100 = 0000$ not reject

P_1 is outside. $y = y_{wmin} = 10$

$x = x_1 + (y - y_1)/m$

$= 130 + (10-5)/-0.88$

$= 130 + (5/-0.88)$

$= 130 - 5.68 = 124.32.$

$(124.32, 10) : 0000$ (P_1)

now trivial Accept :

$0000 \cdot 0000 = 0000$ → Accepted