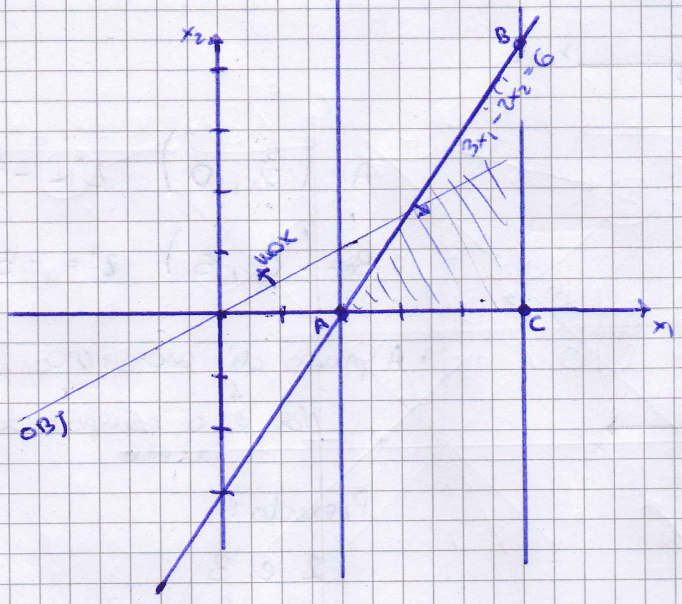
Branch and Bound

$$\max \; -x_1 + 2x_2$$
$$3x_1 - 2x_2 \geq 6$$
$$x_1 \leq 5$$
$$x_1 \geq 2$$
$$x_1, x_2 \geq 0, \text{ interi}$$



$B = \left(5 \quad \frac{9}{2}\right) \rightarrow z^* = 4$

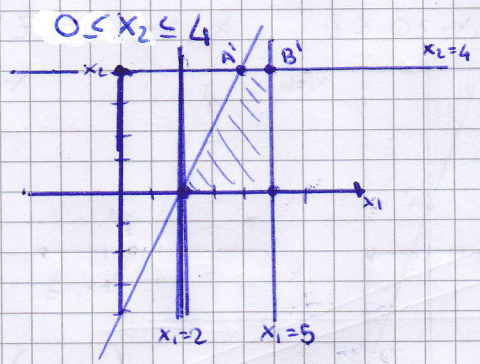
Branch su x_2

$x_2' = 4$

$3x_1 - 2x_2 \geq 6$

$2 \leq x_1 \leq 5$

$0 \leq x_2 \leq 4$



$A' = \left(\frac{14}{3} \quad 4\right) \quad z^* = \frac{-10}{3} = 3{,}33$ → Posso metterlo a 3 poiché i coeff. della fo sono interi

$B' = (5 \quad 4) \quad z^* = 3$

↓

ottengo UB come z^* di B

↓

Termine per Bounding (Non troverò nulla di meglio)

$x_2'' = 5$

$3x_1 - 2x_2 \geq 6$

$2 \leq x_1 \leq 5$

$x_2 \geq 5$

↳ Punto non ammissibile