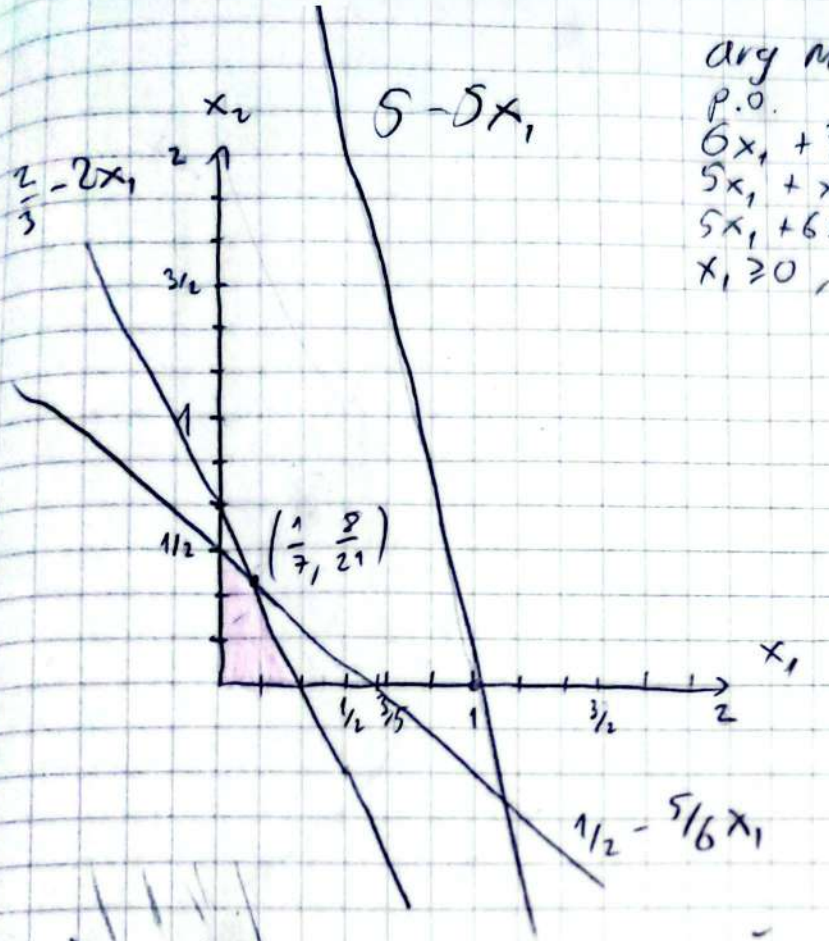


$\arg \max/\min Z(x) = -7x_1 - 2x_2$

p.o.

$6x_1 + 3x_2 \leq 2$ $\quad x_2 \leq \frac{2-6x_1}{3} = \frac{2}{3} - 2x_1$

$5x_1 + x_2 \leq 5$ $\quad x_2 \leq 5 - 5x_1$

$5x_1 + 6x_2 \leq 3$ $\quad x_2 \leq \frac{3-5x_1}{6} = \frac{1}{2} - \frac{5}{6}x_1$

$x_1 \geq 0, \; x_2 \geq 0$

$x_2 = \frac{1}{2} - \frac{5}{6}x_1$

$x_2 = \frac{2}{3} - 2x_1$

$\frac{2}{3} - 2x_1 = \frac{1}{2} - \frac{5}{6}x_1 \; / \cdot 6$

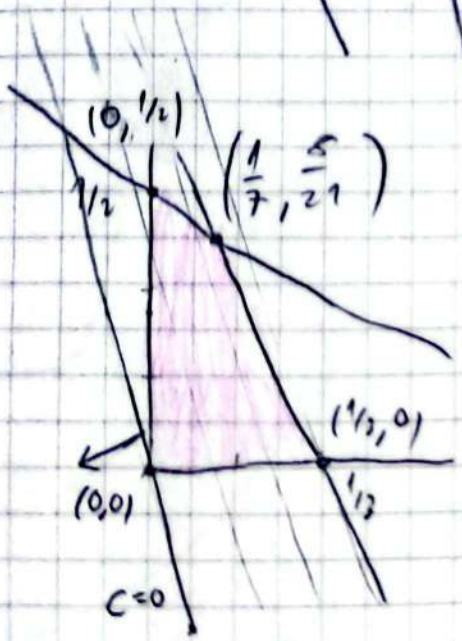
$4 - 12x_1 = 3 - 5x_1$

$-7x_1 = -1$

$x_1 = \frac{1}{7}$

$\Rightarrow x_2 = \frac{2}{3} - \frac{2}{7} = \frac{14-6}{21} = \frac{8}{21}$

POŠTO SU SAMO 4 VRHA DOP OBLASTI I NIJEDNA PRAVA NIJE PARALELNA SA RAVNI FUNKCIJE CILJA ONDA SE MOGU ISPROBATI VRHOVI.



$\vec{x} = (0,0)$

$\vec{x} = (1/3, 0)$

$Z(0,0) = 0$

$Z(1/3, 0) = -7/3$

$Z(x) = -7x_1 - 2x_2$ $\quad \nabla Z = (-7, -2)$

$Z(0, 1/2) = -1$

$Z(\frac{1}{7}, \frac{8}{21}) = -1 - \frac{16}{21} = -\frac{37}{21}$

$C = 0 = -7x_1 - 2x_2$

$x_2 = -\frac{7}{2}x_1$

MAX: $Z(0,0) = 0$

MIN: $Z(1/3, 0) = -\frac{7}{3}$