Найти решение ЗЛП при помощи решения двойственной задачи

$$Z(X) = 2x_1 - 8x_2 + 2x_3 + 1\cdot x_4 \rightarrow \max$$

$$\begin{cases} -2x_1 + x_2 + 4x_3 + 1\cdot x_4 = 8 & y_1 \\ -2x_2 + 2x_3 + 1\cdot x_4 = 6 & y_2 \\ x_1,\ x_2,\ x_3,\ x_3 \geq 0 \end{cases}$$

$$F(Y) = 8\cdot y_1 + 6y_2 \rightarrow \min$$

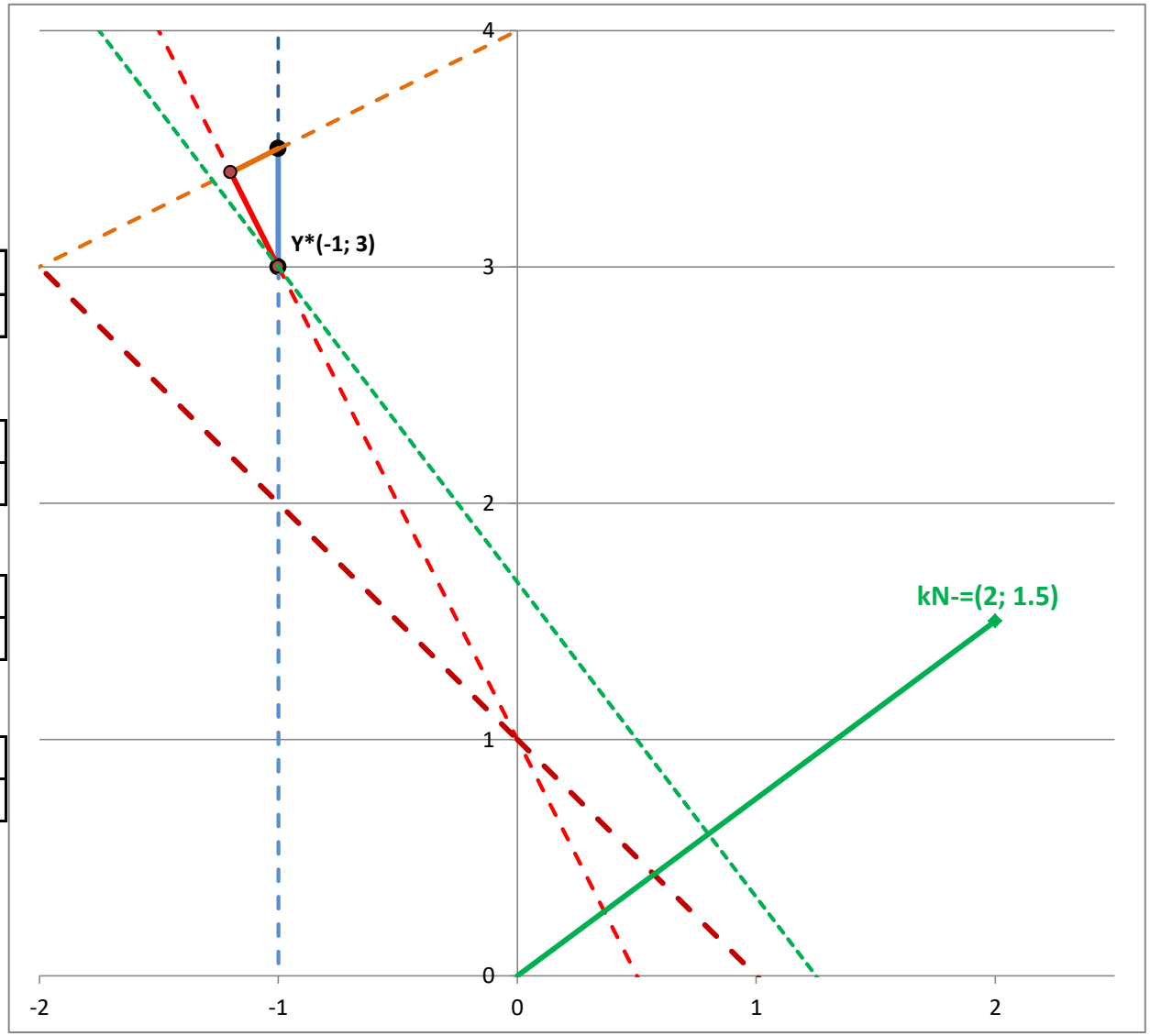
	-1	3			
I	$-2y_1$	$\geq$	2	=	
II	$y_1 - 2y_2$	$\geq$	-8	>	$x^*_2 = 0$
III	$4y_1 + 2y_2$	$\geq$	2	=	
IV	$1\cdot y_1 + 1\cdot y_2$	$\geq$	1	>	$x^*_4 = 0$

		-2	0
I	y_1	-1	-1
	y_2	-1	5

		1	-2
II	y_1	0	-8
	y_2	4	0

		4	2
III	y_1	0	0,5
	y_2	1	0

		1	1
IV	y_1	0	1
	y_2	1	0



N = (8; 6)

0,25 N = (2; 1,5)

$$Y^*: \begin{cases} -2y_1 = 2 \\ 4y_1 + 2y_2 = 2 \end{cases}$$

$$\begin{cases} y^*_1 = -1 \\ y^*_2 = 3 \end{cases}$$

$Y^* =$ (-1; 3)

$F^* = 8\cdot(-1) + 6\cdot 3 =$ **10**

$Z^* = F^* =$ **10**

$$\begin{cases} y^*_1 \neq 0 \\ y^*_2 \neq 0 \end{cases} \qquad \begin{cases} -2x_1 + 4x_3 = 8 \\ 2x_3 = 6 \end{cases} \qquad \begin{cases} x^*_1 = 2 \\ x^*_3 = 3 \end{cases}$$

$X^* =$ (2; 0; 3; 0)