EX 2.5.2 - PAG 48.

MIN $w = -x_1 + 2x_2$

SA $x_1 + x_2 \geq 1$

$-5x_1 + 2x_2 \geq -10$

$3x_1 + 5x_2 \geq 15$

$x_1, x_2 \geq 0$

DUAL

MAX $z = y_1 - 10y_2 + 15y_3$

SA $y_1 - 5y_2 + 3y_3 \leq 1$

$y_1 + 2y_2 + 5y_3 \leq 2$

FORMA PADRÃO

$-z + y_1 - 10y_2 + 15y_3 = 0$

$y_1 - 5y_2 + 3y_3 + yf_1 = 1$

$y_1 + 2y_2 + 5y_3 + yf_2 = 2$

TABELA DO SIMPLEX

BASE	y_1	y_2	y_3 (PIVÔ)	yf_1	yf_2	RHS	
yf_1	1	-5	(3)	1	0	1	$1/3$ ←
yf_2	1	2	5	0	1	2	$2/5$
$-z$	1	-10	15	0	0	0	

BASE	y_1	y_2	y_3	yf_1	yf_2	RHS
y_3	$1/3$	$-5/3$ (PIVÔ)	1	$1/3$	0	$1/3$
yf_2	$-1/3$	$31/3$	0	$-5/3$	1	$1/3$
$-z$	-4	15	0	-5	0	-5

(-15) (-5)

BASE	y_1	y_2	y_3	y_{f1}	y_{f2}	RHS
y_3	$7/31$	0	1	$2/31$	$5/31$	$8/9$
y_2	$-2/31$	1	0	$-5/31$	$3/31$	$1/31$
$-z$	-6	0	0	$-80/31$	$-45/31$	$-170/31$

$(+5)\left(\frac{5}{3}\right)$

RESPOSTA: $y_1 = 0$ $\quad y_{f1} = 0$

$y_2 = 1/31$ $\quad y_{f2} = 0$

$y_3 = 8/9$ $\quad z = 170/31$