$$3x_1 + x_2 + 2x_3$$

$$x_1 + x_2 + 3x_3 \leq 30$$
$$2x_1 + 2x_2 + 5x_3 \leq 24$$
$$4x_1 + x_2 + 2x_3 \leq 36$$
$$x_1, x_2, x_3 \geq 0$$

$$X_1 + X_2 + 3X_3 + A = 30$$
$$2X_1 + 2X_2 + 5X_3 + B = 24$$
$$4X_1 + X_2 + 2X_3 + C = 36$$
$$X_1, X_2, X_3, A, B, C \geq 0$$

Barco

$$Z = \boxed{3X_1} + X_2 + 2X_3$$ no basica

$$A = 30 - X_1 - X_2 - 3X_3$$
$$B = 24 - 2X_1 - 2X_2 - 5X_3$$
$$C = 36 - 4X_1 - X_2 - 2X_3$$

Basica $\neq 0$
No basica $= 0$

Entra?

$X_1 \longrightarrow$ mayor coeficiente

Salir?

$A = 0$	$0 = 30 - X_1$	$X_1 = 30$
$B = 0$	$0 = 24 - 2X_1$	$X_1 = 12$
$C = 0$	$0 = 36 - 4X_1$	$X_1 = 9$

Ⓒ   menor valor positivo

$$\boxed{X_1 = 9 - \frac{1}{4}X_2 - \frac{1}{2}X_3 - \frac{1}{4}C}$$