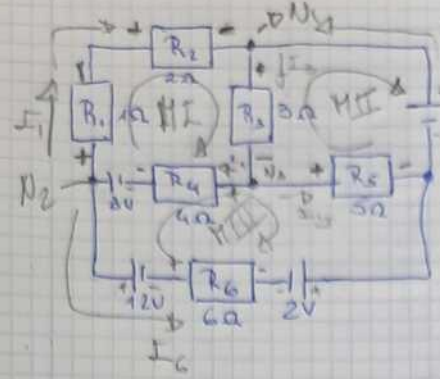

$MI: -I_1R_1 - I_1R_2 - I_3R_3 - I_4R_4 + 3V = 0$

$MII: I_3R_3 - 5V + I_5R_5 = 0V$

$MIII: -3V + I_4R_4 - I_5R_5 - 2V + I_6R_6 + 12V = 0$

$N_1 = I_1 + I_2 - I_3 = 0A$

$N_2 = -I_1 - I_6 + I_4 = 0A$

$N_3 = I_3 - I_5 - I_4 = 0$

I_1	I_2	I_3	I_4	I_5	I_6	
-3	0	-3	-4	0	0	-3
0	0	3	0	5	0	5
0	0	0	4	-5	+6	-7
1	1	-1	0	0	0	0
-1	0	0	1	0	-1	0
0	0	1	-1	-1	0	0

$I_1 = \frac{289}{567} = 0'59\,A$

$I_2 = \frac{41}{567} = 0'07\,A$

$I_3 = \frac{110}{189} = 0'58\,A$

$I_4 = \frac{-13}{189} = -0'068\,A$

$I_5 = \frac{41}{63} = 0'65\,A$

$I_6 = \frac{-328}{567} = -0'58\,A$

La respuesta:

$$x_1 = \frac{289}{567}$$
$$x_2 = \frac{110}{189}$$
$$x_3 = \frac{-41}{567}$$
$$x_4 = \frac{41}{63}$$
$$x_5 = \frac{13}{189}$$
$$x_6 = \frac{328}{567}$$