③ $$\begin{bmatrix} 0.8 & -0.4 & 0 \\ -0.4 & 0.8 & -0.4 \\ 0 & -0.4 & 0.8 \end{bmatrix} \begin{Bmatrix} x_1 \\ x_2 \\ x_3 \end{Bmatrix} = \begin{Bmatrix} 41 \\ 25 \\ 105 \end{Bmatrix}$$

$0.8x_1 - 0.4x_2 + x_3 = 41$ ①

$-0.4x_1 + 0.8x_2 - 0.4x_3 = 25$ ②

$x_1 - 0.4x_2 + 0.8x_3 = 105$ ③

$0.8x_1 - 0.4x_2 + x_3 = 41$

$\frac{0.8x_1}{0.8} = \frac{41 + 0.4x_2 - x_3}{0.8}$

$x_1 = \frac{41 + 0.4x_2 - x_3}{0.8}$ ④

$0.4x_1 + 0.8x_2 - 0.4x_3 = 25$

$\frac{0.8x_2}{0.8} = \frac{-0.4x_1 + 0.4x_3 + 25}{0.8}$

$x_2 = -\frac{0.4x_1}{0.8} + \frac{4x_3}{2} + \frac{25}{0.8}$ ⑤

$x_1 - 0.42x_2 + 0.8x_3 = 105$

$\frac{0.8x_3}{0.8} = \frac{-x_1 + 0.42x_2 + 105}{0.8}$

$x_3 = \frac{-x_1 + 0.42x_2 + 105}{0.8}$ ⑥

	1	2			
x_1	0	$x_1 = \frac{41 + 0.42x_2 - x_3}{0.8}$	$\Rightarrow x_1 = \frac{41 + 0.42(0) - 0}{0.8}$	$\Rightarrow x_1 = \frac{41}{0.8}$	$x_1 = 51.25$
x_2	0	$x_2 = \frac{-0.41x_1}{0.8} + \frac{4x_3}{2} + \frac{25}{0.8}$	$\Rightarrow x_2 = \frac{-0.41(51.25)}{0.8} + \frac{4(0)}{2} + \frac{25}{0.8}$	$x_2 = -26.16 + 31.25$	$x_2 = 4.99$
x_3	0	$x_3 = \frac{-x_1 + 0.42x_2 + 105}{0.8}$	$\Rightarrow \frac{-(51.25) + 0.42(4.99) + 105}{0.8}$	$x_3 = 69.80$	

Iteracion 3

$$x_1 = \frac{41 + 0.42x_2 - x_3}{0.8} \Rightarrow x_1 = \frac{41 + 0.42(4.99) - 69.80}{0.8} = -33.38$$

$$x_2 = \frac{-0.41x_1}{0.8} + \frac{4x_3}{2} + \frac{25}{0.8} \quad x_2 = \frac{-0.41(-33.38)}{0.8} + \frac{4(69.80)}{2} + \frac{25}{0.8} = 187.95$$

$$x_3 = \frac{-x_1 + 0.42x_2 + 105}{0.8} \quad x_3 = \frac{-33.38 + 0.42(187.95) + 105}{0.8} = 188.19$$