

Por método de jacobi

$$8x_1 + 2x_2 - 1x_3 = 6$$

$$0x_1 + 8x_2 + 4x_3 = 4$$

$$-2x_1 + 4x_2 + 9x_3 = 2$$

| | | | | | |
|---|------------|-----------|----------|----|---|
| | | 8 | 2 | -1 | 6 |
| | | -2 | 4 | 9 | 2 |
| | | 0 | 8 | 4 | 4 |
| | | | | | |
| | | | | | |
| k | x1 | x2 | x3 | | |
| 1 | 0.75 | 0.5 | 1 | | |
| 2 | 0.75 | -1.375 | 0 | | |
| 3 | 1.09375 | 0.875 | 3.75 | | |
| 4 | 1 | -7.390625 | -0.75 | | |
| 5 | 2.50390625 | 2.6875 | 15.78125 | | |

Por método de Gauss-Seidel

| | | | | | | | |
|---|------------|-------------|------------|----|---|---|---|
| | C | D | E | F | G | H | I |
| | | | 4 | 1 | 1 | 1 | |
| | | | 3 | -7 | 1 | 2 | |
| | | | 2 | 0 | 6 | 3 | |
| | | | | | | | |
| | | | | | | | |
| k | x1 | x2 | x3 | | | | |
| 1 | 0.25 | -0.17857143 | 0.41666667 | | | | |
| 2 | 0.19047619 | -0.11904762 | 0.41666667 | | | | |
| 3 | 0.17559524 | -0.14455782 | 0.43650794 | | | | |
| 4 | 0.17701247 | -0.14810091 | 0.44146825 | | | | |
| 5 | 0.17665816 | -0.1467849 | 0.44099584 | | | | |

Por método SOR con w=1.25

| | | | | | | |
|---|------------|------------|-----------|---|---|----|
| | | | -5 | 1 | 0 | 3 |
| | | | -2 | 8 | 2 | 6 |
| | | | 0 | 6 | 6 | 12 |
| | | | | | | |
| | | | | | | |
| k | x1 | x2 | x3 | | | |
| 1 | -0.5 | 1.1875 | 1.5625 | | | |
| 2 | -1.0125 | 1.609375 | 3.5 | | | |
| 3 | -1.440625 | 1.41875 | 0.390625 | | | |
| 4 | -1.906875 | 1.8984375 | 0.58125 | | | |
| 5 | -2.2771875 | 2.21390625 | 0.1015625 | | | |