

Metodo Gauss-Seidel

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A

Scribe®

$$3x_1 - 0.1x_2 - 0.2x_3 = 7.85$$

A

$$x_1^0 = 0$$

$$0.1x_1 + 7x_2 - 0.3x_3 = -19.3$$

$$x_2^0 = 0$$

$$0.3x_1 - 0.2x_2 + 10x_3 = 71.4$$

$$x_3^0 = 0$$

$$x_1^{K=1} = \frac{-(-0.1 \cdot 0 + (-0.2)(0)) + 7.85}{3} = \frac{7.85}{3} = 2.616$$

$$x_2^{K=1} = \frac{-((0.1)(2.616) + (-0.3)(0)) + (-19.3)}{7} = -2.794$$

$$x_3^{K=1} = \frac{-((0.3)(2.616) + (-0.2)(-2.794)) + 71.4}{10} = 7.00$$

$$x_1^{K=2} = \frac{-((-0.1)(-2.794) + (-0.2)(7.00)) + 7.85}{3} = 3.056$$

$$x_2^{K=2} = \frac{-((0.1)(3.056) + (-0.3)(7.00)) + (-19.3)}{7} = -2.50$$

$$x_3^{K=2} = \frac{-((0.3)(3.056) + (-0.2)(-2.50)) + 71.4}{10} = 7.00$$

$$x_1^{K=3} = \frac{-((-0.1)(-2.50) + (-0.2)(7.00)) + 7.85}{3} = 3$$

$$x_2^{K=3} = \frac{-((0.1)(3) + (-0.3)(7.00)) + (-19.3)}{7} = -2.5$$

$$x_3^{K=3} = \frac{-((0.3)(3) + (-0.2)(-2.5)) + 71.4}{10} = 7$$