

Aluno: ANA CAROLINA VEDDOY ALVES

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [0.3, 3.0, 3.7, -1.9, -1.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 8.3x_1 + 2.9x_2 - 0.6x_3 - 2.6x_4 - 1.6x_5 = 4.4 \\ -1.7x_1 + 4.5x_2 + 0.0x_3 + 0.1x_4 + 2.7x_5 = 1.5 \\ -0.2x_1 + 0.8x_2 + 5.9x_3 - 0.4x_4 - 2.7x_5 = -0.6 \\ -2.5x_1 + 1.5x_2 + 1.0x_3 + 5.8x_4 + 0.1x_5 = -3.9 \\ -2.0x_1 + 3.0x_2 + 2.9x_3 + 1.4x_4 + 10.5x_5 = 0.3 \end{cases}$$

- a) [0.20149087, 0.37015422, -0.14850112, -0.65723912, 0.08983877]
- b) [0.20265569, 0.37131904, -0.1473363, -0.6560743, 0.09100359]
- c) [0.20340055, 0.3720639, -0.14659144, -0.65532944, 0.09174845]
- d) [0.20287714, 0.37154049, -0.14711485, -0.65585285, 0.09122504]
- e) [0.20318443, 0.37184778, -0.14680756, -0.65554556, 0.09153233]
- f) [0.20277323, 0.37143658, -0.14721876, -0.65595676, 0.09112113]

Aluno: ANDERSON VAILATI RITZMANN

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-3.4, 0.9, -3.6, 3.1, -0.9]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 5.9x_1 + 1.3x_2 - 1.4x_3 + 1.3x_4 + 1.6x_5 = -0.3 \\ 1.6x_1 + 11.5x_2 - 2.2x_3 + 1.4x_4 + 2.4x_5 = 1.9 \\ 0.1x_1 + 1.5x_2 + 6.6x_3 - 1.9x_4 - 1.0x_5 = -0.2 \\ -2.9x_1 - 1.1x_2 - 1.9x_3 + 8.3x_4 - 0.3x_5 = 0.7 \\ 1.6x_1 + 1.8x_2 - 1.8x_3 - 1.1x_4 + 8.9x_5 = -1.1 \end{cases}$$

- a) $[-0.07912917, 0.18894125, -0.0767457, 0.05910231, -0.15372582]$
- b) $[-0.07967007, 0.18840035, -0.0772866, 0.05856141, -0.15426672]$
- c) $[-0.07994844, 0.18812198, -0.07756497, 0.05828304, -0.15454509]$
- d) $[-0.08109273, 0.18697769, -0.07870926, 0.05713875, -0.15568938]$
- e) $[-0.07923717, 0.18883325, -0.0768537, 0.05899431, -0.15383382]$
- f) $[-0.07999244, 0.18807798, -0.07760897, 0.05823904, -0.15458909]$

Aluno: ANDRÉ LUÍS PERIPOLLI

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-4.7, 3.6, -0.1, -1.2, -0.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 9.6x_1 + 0.5x_2 + 1.9x_3 - 1.0x_4 + 0.5x_5 = 3.4 \\ 0.7x_1 + 6.2x_2 - 2.4x_3 + 1.4x_4 + 1.7x_5 = -1.3 \\ 1.1x_1 + 1.8x_2 + 6.4x_3 - 0.8x_4 - 1.9x_5 = 3.8 \\ -2.6x_1 - 1.9x_2 + 1.2x_3 + 7.6x_4 + 0.7x_5 = 2.2 \\ -2.9x_1 + 1.7x_2 - 2.7x_3 + 1.2x_4 + 15.7x_5 = 2.6 \end{cases}$$

a) [0.22531993, -0.09544555, 0.70469831, 0.20236254, 0.32429502]

b) [0.22409715, -0.09666833, 0.70347553, 0.20113976, 0.32307224]

c) [0.2253181, -0.09544738, 0.70469648, 0.20236071, 0.32429319]

d) [0.22542505, -0.09534043, 0.70480343, 0.20246766, 0.32440014]

e) [0.22512798, -0.0956375, 0.70450636, 0.20217059, 0.32410307]

f) [0.22534527, -0.09542021, 0.70472365, 0.20238788, 0.32432036]

Aluno: BRUNO HENRIQUE COSTA SEIXAS

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [3.8, 1.9, -1.3, 2.3, 2.0]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 10.8x_1 + 1.7x_2 + 0.1x_3 - 0.4x_4 + 1.7x_5 = -2.3 \\ 0.6x_1 + 5.5x_2 + 2.7x_3 - 1.6x_4 - 0.6x_5 = 0.4 \\ 0.1x_1 - 0.5x_2 + 3.7x_3 - 0.7x_4 + 1.0x_5 = -0.3 \\ 1.8x_1 - 2.9x_2 + 1.9x_3 + 10.0x_4 + 2.2x_5 = 0.3 \\ 0.7x_1 - 1.3x_2 - 2.9x_3 + 2.4x_4 + 13.9x_5 = 2.3 \end{cases}$$

- a) $[-0.2615483, 0.18782318, -0.0704035, 0.11091128, 0.16379979]$
- b) $[-0.26116235, 0.18820913, -0.07001755, 0.11129723, 0.16418574]$
- c) $[-0.26132988, 0.1880416, -0.07018508, 0.1111297, 0.16401821]$
- d) $[-0.26128195, 0.18808953, -0.07013715, 0.11117763, 0.16406614]$
- e) $[-0.26310458, 0.1862669, -0.07195978, 0.109355, 0.16224351]$
- f) $[-0.26162724, 0.18774424, -0.07048244, 0.11083234, 0.16372085]$

E05 — ANN0001 — CCI

Aluno: DEVAIR DENER DAROLT

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-4.9, -1.6, -0.8, -5.0, 1.5]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 9.5x_1 + 1.8x_2 + 2.0x_3 + 1.0x_4 - 2.2x_5 = 4.7 \\ 2.6x_1 + 6.4x_2 - 1.2x_3 - 1.8x_4 - 0.7x_5 = -1.9 \\ 1.9x_1 + 1.3x_2 + 10.1x_3 + 1.1x_4 - 2.8x_5 = 4.7 \\ 1.4x_1 - 1.9x_2 + 0.3x_3 + 9.0x_4 - 1.8x_5 = 4.7 \\ 1.2x_1 + 0.3x_2 + 1.3x_3 + 2.4x_4 + 10.9x_5 = -0.4 \end{cases}$$

- a) $[0.40412361, -0.32137908, 0.34115319, 0.34245343, -0.18843321]$
- b) $[0.4054341, -0.32006859, 0.34246368, 0.34376392, -0.18712272]$
- c) $[0.40532137, -0.32018132, 0.34235095, 0.34365119, -0.18723545]$
- d) $[0.40560131, -0.31990138, 0.34263089, 0.34393113, -0.18695551]$
- e) $[0.40575507, -0.31974762, 0.34278465, 0.34408489, -0.18680175]$
- f) $[0.40537215, -0.32013054, 0.34240173, 0.34370197, -0.18718467]$

Aluno: ENDREW RAFAEL TREPTOW HANG

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-3.8, -0.2, -2.3, -0.8, 2.9]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 9.7x_1 + 2.5x_2 - 0.7x_3 + 2.5x_4 + 1.7x_5 = -4.8 \\ 2.6x_1 + 9.7x_2 + 1.9x_3 - 2.0x_4 - 2.9x_5 = -3.8 \\ 0.7x_1 + 0.6x_2 + 13.9x_3 + 1.6x_4 - 2.3x_5 = -2.9 \\ 1.1x_1 + 0.5x_2 - 1.7x_3 + 5.5x_4 + 0.9x_5 = 3.6 \\ -2.6x_1 - 1.7x_2 + 3.0x_3 - 2.6x_4 + 11.1x_5 = -4.6 \end{cases}$$

- a) $[-0.6255868, -0.10333189, -0.30999792, 0.74641515, -0.31745931]$
- b) $[-0.62563754, -0.10338263, -0.31004866, 0.74636441, -0.31751005]$
- c) $[-0.6266588, -0.10440389, -0.31106992, 0.74534315, -0.31853131]$
- d) $[-0.62536054, -0.10310563, -0.30977166, 0.74664141, -0.31723305]$
- e) $[-0.62560197, -0.10334706, -0.31001309, 0.74639998, -0.31747448]$
- f) $[-0.62522724, -0.10297233, -0.30963836, 0.74677471, -0.31709975]$

E05 — ANN0001 — CCI

Aluno: FILIPE DA SILVA DE OLIVEIRA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [1.2, -3.7, 1.7, -2.4, -3.9]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 5.1x_1 + 0.2x_2 + 0.0x_3 + 2.6x_4 + 1.0x_5 = -4.0 \\ 2.5x_1 + 8.6x_2 - 2.0x_3 + 2.0x_4 - 0.7x_5 = -3.1 \\ -2.2x_1 - 1.8x_2 + 6.3x_3 - 0.6x_4 + 0.1x_5 = 1.3 \\ 2.2x_1 - 0.7x_2 - 2.8x_3 + 12.3x_4 - 1.5x_5 = 3.9 \\ -0.6x_1 - 1.7x_2 + 1.9x_3 - 1.5x_4 + 7.8x_5 = -2.5 \end{cases}$$

- a) $[-0.90771084, -0.24543796, -0.13737483, 0.39487053, -0.3331464]$
- b) $[-0.90837877, -0.24610589, -0.13804276, 0.3942026, -0.33381433]$
- c) $[-0.90771316, -0.24544028, -0.13737715, 0.39486821, -0.33314872]$
- d) $[-0.90940765, -0.24713477, -0.13907164, 0.39317372, -0.33484321]$
- e) $[-0.90799826, -0.24572538, -0.13766225, 0.39458311, -0.33343382]$
- f) $[-0.90793649, -0.24566361, -0.13760048, 0.39464488, -0.33337205]$

Aluno: FREDERICO MINUZZI

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [2.9, 1.5, 4.5, 2.3, 4.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 6.3x_1 - 0.3x_2 - 2.5x_3 - 1.8x_4 - 1.7x_5 = -4.7 \\ -1.7x_1 + 5.0x_2 - 0.7x_3 - 0.1x_4 - 1.3x_5 = 0.8 \\ -0.7x_1 - 1.7x_2 + 8.3x_3 + 0.8x_4 + 2.6x_5 = -1.8 \\ -0.5x_1 - 3.0x_2 + 1.0x_3 + 9.6x_4 - 2.2x_5 = -4.9 \\ 0.4x_1 - 0.1x_2 + 0.7x_3 - 1.5x_4 + 5.1x_5 = 0.9 \end{cases}$$

- a) $[-1.01202067, -0.20689021, -0.33080325, -0.56237507, 0.13272353]$
- b) $[-1.01168712, -0.20655666, -0.3304697, -0.56204152, 0.13305708]$
- c) $[-1.01146457, -0.20633411, -0.33024715, -0.56181897, 0.13327963]$
- d) $[-1.01305786, -0.2079274, -0.33184044, -0.56341226, 0.13168634]$
- e) $[-1.01201296, -0.2068825, -0.33079554, -0.56236736, 0.13273124]$
- f) $[-1.011433, -0.20630254, -0.33021558, -0.5617874, 0.1333112]$

E05 — ANN0001 — CCI

Aluno: GUILHERME ARAÚJO LIRA DE MENEZES

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [2.2, 3.8, 3.7, -2.7, 2.4]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 6.7x_1 + 0.0x_2 - 1.4x_3 - 1.9x_4 + 2.7x_5 = -4.1 \\ 2.8x_1 + 11.4x_2 + 1.4x_3 + 2.2x_4 - 2.4x_5 = 4.4 \\ -1.2x_1 - 2.1x_2 + 14.5x_3 - 2.8x_4 - 1.8x_5 = -1.8 \\ -0.2x_1 + 1.2x_2 - 0.2x_3 + 5.6x_4 + 1.4x_5 = 2.4 \\ 1.0x_1 + 1.2x_2 + 0.2x_3 + 1.8x_4 + 6.5x_5 = 0.9 \end{cases}$$

a) $[-0.55905409, 0.48558329, -0.0361633, 0.29073382, 0.05765753]$

b) $[-0.55910224, 0.48553514, -0.03621145, 0.29068567, 0.05760938]$

c) $[-0.55850322, 0.48613416, -0.03561243, 0.29128469, 0.0582084]$

d) $[-0.55872393, 0.48591345, -0.03583314, 0.29106398, 0.05798769]$

e) $[-0.55923767, 0.48539971, -0.03634688, 0.29055024, 0.05747395]$

f) $[-0.56040998, 0.4842274, -0.03751919, 0.28937793, 0.05630164]$

Aluno: GUILHERME LAFUENTE GONÇALVES

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [0.2, 0.0, -1.9, 0.7, -3.2]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 14.8x_1 + 1.3x_2 - 1.0x_3 + 1.3x_4 + 2.8x_5 = 3.3 \\ -1.7x_1 + 15.9x_2 + 2.8x_3 - 2.6x_4 + 1.3x_5 = 3.5 \\ -0.7x_1 - 0.4x_2 + 10.3x_3 + 2.0x_4 - 2.7x_5 = 4.4 \\ -1.0x_1 - 0.1x_2 - 2.4x_3 + 8.5x_4 + 2.6x_5 = -0.9 \\ 1.7x_1 - 2.9x_2 - 1.7x_3 - 2.3x_4 + 8.9x_5 = -4.6 \end{cases}$$

a) [0.28670689, 0.25040824, 0.32799327, 0.14425969, -0.38926239]

b) [0.28614167, 0.24984302, 0.32742805, 0.14369447, -0.38982761]

c) [0.28663454, 0.25033589, 0.32792092, 0.14418734, -0.38933474]

d) [0.2859816, 0.24968295, 0.32726798, 0.1435344, -0.38998768]

e) [0.28470779, 0.24840914, 0.32599417, 0.14226059, -0.39126149]

f) [0.2859859, 0.24968725, 0.32727228, 0.1435387, -0.38998338]

E05 — ANN0001 — CCI

Aluno: HENRIQUE WIPPEL PARUCKER DA SILVA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-3.2, 3.2, 4.6, 2.3, 0.7]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 3.0x_1 + 0.0x_2 + 1.2x_3 - 0.1x_4 - 1.0x_5 = 2.4 \\ -2.4x_1 + 9.4x_2 + 1.8x_3 + 1.8x_4 + 2.2x_5 = 3.4 \\ -1.8x_1 + 1.8x_2 + 13.8x_3 + 1.6x_4 - 2.0x_5 = -0.4 \\ -0.6x_1 - 2.4x_2 - 1.6x_3 + 4.8x_4 - 0.1x_5 = -2.9 \\ -1.1x_1 + 1.8x_2 - 1.6x_3 + 0.8x_4 + 9.8x_5 = -0.2 \end{cases}$$

- a) [0.78106284, 0.60405194, 0.0154601, -0.19980543, -0.02325402]
- b) [0.78082059, 0.60380969, 0.01521785, -0.20004768, -0.02349627]
- c) [0.78074307, 0.60373217, 0.01514033, -0.2001252, -0.02357379]
- d)** [0.77944898, 0.60243808, 0.01384624, -0.20141929, -0.02486788]
- e) [0.78139929, 0.60438839, 0.01579655, -0.19946898, -0.02291757]
- f) [0.78127685, 0.60426595, 0.01567411, -0.19959142, -0.02304001]

Aluno: JOÃO GUILHERME PELIZZA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [2.7, 4.0, -4.7, 4.1, -4.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 5.9x_1 + 0.5x_2 - 1.6x_3 + 2.0x_4 + 1.2x_5 = 0.1 \\ -3.0x_1 + 12.3x_2 - 1.6x_3 - 2.6x_4 - 2.7x_5 = -2.7 \\ 2.0x_1 + 0.8x_2 + 9.2x_3 + 1.5x_4 - 2.3x_5 = 4.7 \\ -2.4x_1 - 1.9x_2 - 2.1x_3 + 9.5x_4 + 0.8x_5 = -1.5 \\ 1.7x_1 + 1.1x_2 - 2.8x_3 + 1.9x_4 + 8.4x_5 = -4.7 \end{cases}$$

- a) $[0.2359602, -0.216586, 0.37094827, -0.02133325, -0.44909558]$
- b)** $[0.23486345, -0.21768275, 0.36985152, -0.02243, -0.45019233]$
- c) $[0.23652246, -0.21602374, 0.37151053, -0.02077099, -0.44853332]$
- d) $[0.23682497, -0.21572123, 0.37181304, -0.02046848, -0.44823081]$
- e) $[0.23619589, -0.21635031, 0.37118396, -0.02109756, -0.44885989]$
- f) $[0.23603516, -0.21651104, 0.37102323, -0.02125829, -0.44902062]$

E05 — ANN0001 — CCI

Aluno: JOSÉ EDUARDO BRANDÃO

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-4.3, -5.0, -2.0, -0.1, 0.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 6.0x_1 + 1.6x_2 + 2.0x_3 + 1.1x_4 - 1.3x_5 = 0.9 \\ 0.7x_1 + 5.0x_2 + 1.5x_3 + 0.5x_4 + 2.1x_5 = 2.2 \\ -0.6x_1 - 0.6x_2 + 5.5x_3 + 0.6x_4 + 2.5x_5 = 1.2 \\ -2.4x_1 - 2.8x_2 - 1.6x_3 + 11.0x_4 - 1.7x_5 = 5.0 \\ 3.0x_1 - 1.9x_2 + 1.2x_3 - 1.2x_4 + 8.6x_5 = -0.0 \end{cases}$$

a) $[-0.03969605, 0.29567648, 0.12209598, 0.56115381, 0.1419071]$

b) $[-0.03949829, 0.29587424, 0.12229374, 0.56135157, 0.14210486]$

c) $[-0.03961535, 0.29575718, 0.12217668, 0.56123451, 0.1419878]$

d) $[-0.04100102, 0.29437151, 0.12079101, 0.55984884, 0.14060213]$

e) $[-0.03937847, 0.29599406, 0.12241356, 0.56147139, 0.14222468]$

f) $[-0.03976766, 0.29560487, 0.12202437, 0.5610822, 0.14183549]$

E05 — ANN0001 — CCI

Aluno: LEONARDO DE CASTRO

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-1.2, 3.3, -2.3, 3.7, -1.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 9.4x_1 + 2.4x_2 + 2.9x_3 + 1.3x_4 - 1.1x_5 = 2.5 \\ 1.8x_1 + 5.6x_2 + 0.3x_3 + 1.4x_4 + 1.8x_5 = -4.1 \\ -0.9x_1 + 1.0x_2 + 5.1x_3 - 2.9x_4 + 0.0x_5 = -3.4 \\ 2.8x_1 - 1.7x_2 + 1.5x_3 + 7.6x_4 + 1.3x_5 = 1.9 \\ -1.1x_1 - 0.4x_2 - 0.7x_3 + 0.3x_4 + 5.2x_5 = -2.7 \end{cases}$$

- a) $[0.50045068, -0.72077795, -0.39575896, 0.0725311, -0.52627039]$
- b) $[0.50234608, -0.71888255, -0.39386356, 0.0744265, -0.52437499]$
- c) $[0.50169243, -0.7195362, -0.39451721, 0.07377285, -0.52502864]$
- d) $[0.50195186, -0.71927677, -0.39425778, 0.07403228, -0.52476921]$
- e) $[0.50223935, -0.71898928, -0.39397029, 0.07431977, -0.52448172]$
- f) $[0.5022902, -0.71893843, -0.39391944, 0.07437062, -0.52443087]$

E05 — ANN0001 — CCI

Aluno: LEONARDO SILVA VASQUEZ RIBEIRO

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [0.2, -0.3, 0.4, 2.8, 4.8]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 5.5x_1 - 0.4x_2 - 0.8x_3 - 0.6x_4 - 3.0x_5 = -2.1 \\ -1.7x_1 + 9.6x_2 + 1.0x_3 + 2.8x_4 - 2.7x_5 = -2.8 \\ 2.5x_1 - 1.3x_2 + 13.6x_3 - 2.7x_4 - 1.4x_5 = -2.1 \\ -0.5x_1 + 0.4x_2 - 2.7x_3 + 6.8x_4 + 0.9x_5 = -2.7 \\ 1.1x_1 + 0.5x_2 + 2.5x_3 - 1.0x_4 + 13.2x_5 = 2.7 \end{cases}$$

a) $[-0.34435661, -0.11563052, -0.17907048, -0.51640893, 0.23469922]$

b) $[-0.34462131, -0.11589522, -0.17933518, -0.51667363, 0.23443452]$

c) $[-0.34476969, -0.1160436, -0.17948356, -0.51682201, 0.23428614]$

d) $[-0.34478357, -0.11605748, -0.17949744, -0.51683589, 0.23427226]$

e) $[-0.3462066, -0.11748051, -0.18092047, -0.51825892, 0.23284923]$

f) $[-0.34467847, -0.11595238, -0.17939234, -0.51673079, 0.23437736]$

Aluno: LUCAS MATHEUS CAMILO VEIGA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [1.2, -1.5, 2.1, 2.7, -4.8]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 4.7x_1 - 1.0x_2 + 1.1x_3 + 0.3x_4 - 2.1x_5 = -0.8 \\ -1.4x_1 + 9.2x_2 + 0.1x_3 - 0.1x_4 + 0.1x_5 = 4.1 \\ 0.4x_1 - 1.7x_2 + 8.7x_3 + 2.6x_4 + 1.3x_5 = -4.2 \\ -3.0x_1 + 0.0x_2 - 1.1x_3 + 5.7x_4 + 0.2x_5 = 0.5 \\ -0.2x_1 - 1.3x_2 - 2.6x_3 - 2.0x_4 + 8.7x_5 = -1.4 \end{cases}$$

a) $[-0.08378804, 0.44010317, -0.35496234, -0.01715815, -0.20666157]$

b) $[-0.08528274, 0.43860847, -0.35645704, -0.01865285, -0.20815627]$

c) $[-0.08394306, 0.43994815, -0.35511736, -0.01731317, -0.20681659]$

d) $[-0.08392904, 0.43996217, -0.35510334, -0.01729915, -0.20680257]$

e) $[-0.08350871, 0.4403825, -0.35468301, -0.01687882, -0.20638224]$

f) $[-0.08397754, 0.43991367, -0.35515184, -0.01734765, -0.20685107]$

Aluno: LUCAS MENEGHELLI PEREIRA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [2.4, -1.4, 1.0, 2.3, 4.1]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 2.1x_1 + 0.2x_2 + 0.0x_3 + 1.0x_4 - 0.9x_5 = 0.6 \\ -0.5x_1 + 6.8x_2 + 1.9x_3 + 2.2x_4 + 1.9x_5 = -4.1 \\ -2.9x_1 + 0.7x_2 + 10.4x_3 - 2.4x_4 + 1.6x_5 = 0.6 \\ 0.0x_1 - 2.2x_2 - 0.2x_3 + 12.5x_4 + 2.0x_5 = -0.3 \\ 2.1x_1 - 2.9x_2 + 2.4x_3 + 0.9x_4 + 10.5x_5 = -2.9 \end{cases}$$

- a) $[0.14045777, -0.50209955, 0.19807732, -0.03151559, -0.48553062]$
- b) $[0.14147726, -0.50108006, 0.19909681, -0.0304961, -0.48451113]$
- c) $[0.14230972, -0.5002476, 0.19992927, -0.02966364, -0.48367867]$
- d) $[0.142026, -0.50053132, 0.19964555, -0.02994736, -0.48396239]$
- e) $[0.14160171, -0.50095561, 0.19922126, -0.03037165, -0.48438668]$
- f) $[0.14174155, -0.50081577, 0.1993611, -0.03023181, -0.48424684]$

Aluno: MARCOS VALDECIR CAVALHEIRO JUNIOR

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-0.5, 3.9, 0.8, -4.7, 4.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 4.2x_1 + 0.8x_2 + 1.1x_3 - 1.1x_4 - 0.3x_5 = 3.1 \\ -2.9x_1 + 5.8x_2 - 0.5x_3 + 0.9x_4 + 1.4x_5 = -1.2 \\ 2.0x_1 - 0.9x_2 + 13.8x_3 + 1.9x_4 + 0.0x_5 = 2.6 \\ 0.1x_1 + 0.7x_2 + 2.9x_3 + 7.5x_4 + 2.1x_5 = 3.3 \\ -0.7x_1 - 2.8x_2 - 0.8x_3 - 2.1x_4 + 14.8x_5 = -3.3 \end{cases}$$

a) [0.81067129, 0.15621701, 0.02285302, 0.43353077, -0.09165609]

b) [0.81129585, 0.15684157, 0.02347758, 0.43415533, -0.09103153]

c) [0.81090772, 0.15645344, 0.02308945, 0.4337672, -0.09141966]

d) [0.8109089, 0.15645462, 0.02309063, 0.43376838, -0.09141848]

e) [0.8094909, 0.15503662, 0.02167263, 0.43235038, -0.09283648]

f) [0.81063647, 0.15618219, 0.0228182, 0.43349595, -0.09169091]

E05 — ANN0001 — CCI

Aluno: MATHEUS RAMBO DA ROZA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [0.1, 4.3, 1.7, -1.5, 0.1]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 9.1x_1 + 1.6x_2 + 0.3x_3 - 1.4x_4 + 2.9x_5 = -0.4 \\ 1.6x_1 + 11.2x_2 - 1.8x_3 - 0.9x_4 + 2.1x_5 = -5.0 \\ 0.9x_1 + 2.9x_2 + 8.8x_3 + 0.9x_4 - 2.9x_5 = 0.4 \\ 1.8x_1 + 1.5x_2 - 1.0x_3 + 9.2x_4 - 2.5x_5 = -0.3 \\ 2.1x_1 - 2.3x_2 - 2.3x_3 + 1.4x_4 + 9.6x_5 = -3.7 \end{cases}$$

a) $[0.16128328, -0.38507187, 0.00959725, -0.13210507, -0.49010941]$

b) $[0.16145568, -0.38489947, 0.00976965, -0.13193267, -0.48993701]$

c) $[0.16128999, -0.38506516, 0.00960396, -0.13209836, -0.4901027]$

d) $[0.16103815, -0.385317, 0.00935212, -0.1323502, -0.49035454]$

e) $[0.16145011, -0.38490504, 0.00976408, -0.13193824, -0.48994258]$

f) $[0.15983751, -0.38651764, 0.00815148, -0.13355084, -0.49155518]$

Aluno: NILTON JOSÉ MOCELIN JÚNIOR

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-0.7, 1.8, -4.6, 2.1, 4.9]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 8.1x_1 - 1.6x_2 + 1.4x_3 + 1.5x_4 + 2.7x_5 = 2.0 \\ -2.0x_1 + 15.5x_2 + 2.2x_3 - 1.7x_4 + 1.2x_5 = -0.3 \\ -1.8x_1 - 1.9x_2 + 10.0x_3 - 1.8x_4 + 2.9x_5 = -4.4 \\ 2.5x_1 + 2.9x_2 + 0.6x_3 + 10.7x_4 - 2.3x_5 = -1.1 \\ -0.7x_1 + 2.8x_2 + 1.5x_3 + 0.5x_4 + 14.5x_5 = 4.9 \end{cases}$$

a) [0.22490127, 0.04765886, -0.51370352, -0.05217846, 0.39648737]

b) [0.22504611, 0.0478037, -0.51355868, -0.05203362, 0.39663221]

c) [0.22503364, 0.04779123, -0.51357115, -0.05204609, 0.39661974]

d) [0.22505094, 0.04780853, -0.51355385, -0.05202879, 0.39663704]

e) [0.22472178, 0.04747937, -0.51388301, -0.05235795, 0.39630788]

f) [0.22337244, 0.04613003, -0.51523235, -0.05370729, 0.39495854]

Aluno: PAULO ROBERTO ALBUQUERQUE

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-4.1, -2.2, 4.8, 2.3, -2.7]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 11.4x_1 + 2.8x_2 - 1.3x_3 - 0.7x_4 + 1.8x_5 = -4.1 \\ -1.7x_1 + 9.7x_2 - 2.6x_3 + 1.4x_4 - 2.5x_5 = -4.0 \\ -0.3x_1 + 0.5x_2 + 5.9x_3 - 2.1x_4 + 0.4x_5 = 3.0 \\ -2.4x_1 - 0.1x_2 - 0.7x_3 + 11.7x_4 + 2.8x_5 = -0.4 \\ 1.0x_1 - 2.9x_2 + 1.1x_3 + 1.7x_4 + 8.8x_5 = -3.8 \end{cases}$$

a) $[-0.05724787, -0.44612046, 0.64557094, 0.15357922, -0.68062252]$

b) $[-0.05800908, -0.44688167, 0.64480973, 0.15281801, -0.68138373]$

c) $[-0.05761051, -0.4464831, 0.6452083, 0.15321658, -0.68098516]$

d) $[-0.05793061, -0.4468032, 0.6448882, 0.15289648, -0.68130526]$

e) $[-0.05765601, -0.4465286, 0.6451628, 0.15317108, -0.68103066]$

f) $[-0.05912787, -0.44800046, 0.64369094, 0.15169922, -0.68250252]$

Aluno: RAFAEL DE MELO BÖEGER

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-4.1, 1.9, 4.5, -4.1, -0.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 11.5x_1 + 2.7x_2 + 2.9x_3 + 1.7x_4 + 2.7x_5 = 0.5 \\ 0.9x_1 + 5.6x_2 + 1.2x_3 + 1.6x_4 + 1.3x_5 = 1.0 \\ 1.6x_1 - 0.3x_2 + 6.2x_3 - 1.2x_4 + 1.4x_5 = -0.7 \\ 0.2x_1 - 2.7x_2 + 2.0x_3 + 9.1x_4 - 2.6x_5 = -0.3 \\ -2.8x_1 - 2.0x_2 - 1.3x_3 + 2.7x_4 + 10.6x_5 = 1.0 \end{cases}$$

a) [0.0035671, 0.16294719, -0.11267399, 0.06830749, 0.09572248]

b) [0.00222231, 0.1616024, -0.11401878, 0.0669627, 0.09437769]

c) [0.00361347, 0.16299356, -0.11262762, 0.06835386, 0.09576885]

d) [0.00372763, 0.16310772, -0.11251346, 0.06846802, 0.09588301]

e) [0.00393902, 0.16331911, -0.11230207, 0.06867941, 0.0960944]

f) [0.00404854, 0.16342863, -0.11219255, 0.06878893, 0.09620392]

E05 — ANN0001 — CCI

Aluno: RAFAEL DOS SANTOS PEREIRA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-0.6, 1.9, 0.8, 0.6, 3.0]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 6.5x_1 - 1.1x_2 + 2.0x_3 + 2.8x_4 - 0.4x_5 = -2.9 \\ -0.1x_1 + 8.5x_2 + 1.6x_3 - 1.4x_4 - 1.8x_5 = -1.9 \\ 2.5x_1 - 1.5x_2 + 8.7x_3 - 1.3x_4 - 1.6x_5 = 1.5 \\ 2.5x_1 + 1.7x_2 - 2.6x_3 + 8.7x_4 - 1.8x_5 = -0.0 \\ 2.5x_1 - 1.9x_2 - 2.7x_3 - 0.3x_4 + 7.7x_5 = 4.5 \end{cases}$$

a) $[-0.9294099, -0.00433796, 0.76934754, 0.74466171, 1.18498109]$

b) $[-0.92947078, -0.00439884, 0.76928666, 0.74460083, 1.18492021]$

c) $[-0.92915231, -0.00408037, 0.76960513, 0.7449193, 1.18523868]$

d) $[-0.92903826, -0.00396632, 0.76971918, 0.74503335, 1.18535273]$

e) $[-0.93100139, -0.00592945, 0.76775605, 0.74307022, 1.1833896]$

f) $[-0.92907049, -0.00399855, 0.76968695, 0.74500112, 1.1853205]$

Aluno: ROBSON BERTHELSEN

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [0.8, 1.2, -0.9, 3.6, -2.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 11.5x_1 + 1.3x_2 + 0.4x_3 + 1.9x_4 + 1.3x_5 = -0.4 \\ -1.8x_1 + 9.5x_2 + 1.6x_3 - 2.7x_4 - 0.6x_5 = 2.9 \\ -1.0x_1 + 2.8x_2 + 7.9x_3 - 2.7x_4 - 0.6x_5 = 2.0 \\ -2.4x_1 + 0.2x_2 - 2.9x_3 + 9.4x_4 + 2.4x_5 = -3.2 \\ -0.5x_1 + 2.3x_2 + 1.1x_3 - 0.8x_4 + 7.1x_5 = -2.4 \end{cases}$$

- a) [0.02370668, 0.21259169, 0.08033756, -0.20099305, -0.43795796]
- b) [0.02341423, 0.21229924, 0.08004511, -0.2012855, -0.43825041]
- c) [0.02339671, 0.21228172, 0.08002759, -0.20130302, -0.43826793]
- d) [0.02188366, 0.21076867, 0.07851454, -0.20281607, -0.43978098]
- e) [0.0237109, 0.21259591, 0.08034178, -0.20098883, -0.43795374]
- f) [0.02309295, 0.21197796, 0.07972383, -0.20160678, -0.43857169]

E05 — ANN0001 — CCI

Aluno: THIAGO BRANDENBURG

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [3.3, 3.6, -1.6, -2.1, 2.7]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 7.8x_1 + 1.1x_2 - 1.9x_3 + 2.5x_4 - 1.7x_5 = 3.9 \\ 0.6x_1 + 5.0x_2 + 0.2x_3 + 1.4x_4 - 1.5x_5 = 3.4 \\ 0.6x_1 + 0.3x_2 + 6.9x_3 + 0.4x_4 - 2.7x_5 = -4.9 \\ -1.3x_1 - 1.7x_2 - 0.7x_3 + 4.7x_4 - 0.7x_5 = 4.5 \\ 2.2x_1 - 2.1x_2 - 2.9x_3 - 1.0x_4 + 10.9x_5 = 4.7 \end{cases}$$

a) [0.01704257, 0.52858724, -0.61476046, 1.13202012, 0.47087745]

b) [0.01717693, 0.5287216, -0.6146261, 1.13215448, 0.47101181]

c) [0.01552006, 0.52706473, -0.61628297, 1.13049761, 0.46935494]

d) [0.01738974, 0.52893441, -0.61441329, 1.13236729, 0.47122462]

e) [0.01724935, 0.52879402, -0.61455368, 1.1322269, 0.47108423]

f) [0.0168756, 0.52842027, -0.61492743, 1.13185315, 0.47071048]

E05 — ANN0001 — CCI

Aluno: THIAGO PIMENTA BARROS SILVA

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [-0.8, -4.1, 0.6, -0.4, 1.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 10.2x_1 + 0.9x_2 + 2.6x_3 - 1.6x_4 - 2.7x_5 = 4.1 \\ -0.7x_1 + 6.9x_2 + 1.4x_3 - 2.1x_4 - 2.1x_5 = 2.6 \\ -2.4x_1 + 2.4x_2 + 8.6x_3 + 1.5x_4 + 2.1x_5 = 0.0 \\ -1.0x_1 + 0.2x_2 - 2.2x_3 + 8.2x_4 - 0.9x_5 = -2.6 \\ 1.4x_1 + 1.8x_2 + 0.4x_3 - 1.7x_4 + 7.7x_5 = 0.7 \end{cases}$$

- a) [0.29208228, 0.28005973, 0.07628296, -0.2768095, -0.09050288]
- b) [0.29160679, 0.27958424, 0.07580747, -0.27728499, -0.09097837]
- c) [0.29153427, 0.27951172, 0.07573495, -0.27735751, -0.09105089]
- d) [0.29028646, 0.27826391, 0.07448714, -0.27860532, -0.0922987]
- e) [0.29130425, 0.2792817, 0.07550493, -0.27758753, -0.09128091]
- f) [0.29188037, 0.27985782, 0.07608105, -0.27701141, -0.09070479]

Aluno: VINICIUS GASPARINI

Submeter até: 23/09/2019 23:59hs

Q1 Use o método iterativo de Gauss-Seidel, com estimativa inicial $X^{(1)} = [1.4, -4.6, 2.8, 1.7, -2.5]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 10.7x_1 - 2.3x_2 + 2.4x_3 - 2.2x_4 - 0.9x_5 = 3.8 \\ -0.7x_1 + 12.6x_2 + 2.7x_3 - 2.0x_4 + 1.8x_5 = 1.6 \\ 1.1x_1 + 1.0x_2 + 11.1x_3 - 2.2x_4 + 2.0x_5 = -4.4 \\ -2.5x_1 - 1.4x_2 + 0.3x_3 + 9.5x_4 + 2.4x_5 = 1.9 \\ -2.1x_1 + 1.2x_2 - 0.3x_3 - 1.5x_4 + 7.5x_5 = 0.8 \end{cases}$$

- a) $[0.61497937, 0.2764062, -0.46322161, 0.34631807, 0.28646087]$
- b) $[0.61451673, 0.27594356, -0.46368425, 0.34585543, 0.28599823]$
- c) $[0.6132759, 0.27470273, -0.46492508, 0.3446146, 0.2847574]$
- d) $[0.61525541, 0.27668224, -0.46294557, 0.34659411, 0.28673691]$
- e) $[0.6145512, 0.27597803, -0.46364978, 0.3458899, 0.2860327]$
- f) $[0.61464292, 0.27606975, -0.46355806, 0.34598162, 0.28612442]$