

Aluno: ANA CAROLINA VEDDOY ALVES

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-4.0, 1.8, -3.4, -2.1, -3.0, 3.1, -4.7]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 10.9x_1 + 1.0x_2 - 0.7x_3 - 1.2x_4 - 1.8x_5 + 1.8x_6 + 2.5x_7 = 3.0 \\ -2.8x_1 + 14.7x_2 - 1.1x_3 + 1.7x_4 + 1.7x_5 + 0.9x_6 + 2.9x_7 = -1.3 \\ 1.0x_1 + 1.2x_2 + 8.5x_3 + 2.1x_4 - 1.9x_5 + 1.1x_6 - 0.1x_7 = 3.6 \\ -1.4x_1 - 2.2x_2 - 2.9x_3 + 18.2x_4 + 3.0x_5 - 0.6x_6 + 2.7x_7 = 4.6 \\ -1.0x_1 - 0.9x_2 + 2.2x_3 - 1.6x_4 + 10.1x_5 + 0.2x_6 + 2.5x_7 = 4.1 \\ -0.3x_1 - 1.3x_2 + 1.2x_3 - 0.9x_4 - 2.1x_5 + 13.7x_6 - 2.5x_7 = 1.0 \\ 0.2x_1 - 1.6x_2 + 2.1x_3 + 1.2x_4 - 1.6x_5 - 0.1x_6 + 9.1x_7 = 4.8 \end{cases}$$

- a)* [0.25980738, -0.15627773, 0.40287939, 0.21874816, 0.25782894, 0.15860257, 0.41927537]
b) [0.26162153, -0.15446358, 0.40469354, 0.22056231, 0.25964309, 0.16041672, 0.42108952]
c) [0.26159122, -0.15449389, 0.40466323, 0.220532, 0.25961278, 0.16038641, 0.42105921]
d) [0.26127292, -0.15481219, 0.40434493, 0.2202137, 0.25929448, 0.16006811, 0.42074091]
e) [0.26081163, -0.15527348, 0.40388364, 0.21975241, 0.25883319, 0.15960682, 0.42027962]
f) [0.26143194, -0.15465317, 0.40450395, 0.22037272, 0.2594535, 0.16022713, 0.42089993]

E04 — ANN0001 — CCI

Aluno: ANDERSON VAILATI RITZMANN

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [4.8, 1.6, -3.4, 1.9, 3.1, 1.7, -1.0]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 19.0x_1 - 2.3x_2 + 1.2x_3 + 2.0x_4 + 2.9x_5 + 2.5x_6 - 1.5x_7 = -5.0 \\ 2.7x_1 + 15.3x_2 + 1.2x_3 - 2.9x_4 + 0.9x_5 - 2.9x_6 + 2.9x_7 = 2.8 \\ 0.5x_1 - 0.6x_2 + 6.7x_3 + 1.7x_4 + 1.4x_5 - 0.5x_6 + 1.1x_7 = -1.2 \\ 0.5x_1 + 2.4x_2 - 0.5x_3 + 9.4x_4 + 1.4x_5 - 1.6x_6 + 1.1x_7 = -0.8 \\ -1.6x_1 + 2.5x_2 + 2.9x_3 + 2.8x_4 + 13.0x_5 - 2.6x_6 - 0.3x_7 = -0.7 \\ -1.2x_1 - 2.2x_2 - 0.3x_3 + 0.8x_4 - 0.4x_5 + 13.4x_6 + 2.2x_7 = -2.7 \\ -0.4x_1 - 2.2x_2 + 0.0x_3 + 3.0x_4 - 2.0x_5 + 2.6x_6 + 11.8x_7 = -3.1 \end{array} \right.$$

- a) $[-0.1966922, 0.21437749, -0.07164417, -0.11964769, -0.11072766, -0.15043551, -0.18308698]$
- b) $[-0.19599816, 0.21507153, -0.07095013, -0.11895365, -0.11003362, -0.14974147, -0.18239294]$
- c) $[-0.19782062, 0.21324907, -0.07277259, -0.12077611, -0.11185608, -0.15156393, -0.1842154]$
- d) $[-0.19595806, 0.21511163, -0.07091003, -0.11891355, -0.10999352, -0.14970137, -0.18235284]$
- e) $[-0.19681673, 0.21425296, -0.0717687, -0.11977222, -0.11085219, -0.15056004, -0.18321151]$
- f) $[-0.19664762, 0.21442207, -0.07159959, -0.11960311, -0.11068308, -0.15039093, -0.1830424]$

Aluno: ANDRÉ LUÍS PERIPOLLI

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [3.7, 0.9, 4.5, 3.8, 1.9, 1.5, -3.4]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 13.6x_1 - 2.4x_2 + 2.6x_3 - 0.7x_4 + 2.9x_5 + 2.7x_6 + 1.1x_7 = -4.4 \\ 1.3x_1 + 10.1x_2 + 1.8x_3 - 0.7x_4 + 0.8x_5 + 2.6x_6 + 2.6x_7 = 0.5 \\ -0.8x_1 + 0.3x_2 + 11.4x_3 + 2.3x_4 + 2.1x_5 - 2.4x_6 - 0.5x_7 = 0.6 \\ 1.4x_1 - 2.4x_2 - 3.0x_3 + 12.1x_4 - 1.7x_5 + 1.6x_6 - 1.9x_7 = -4.4 \\ 2.1x_1 - 0.8x_2 - 2.6x_3 + 2.5x_4 + 14.4x_5 + 1.5x_6 - 1.9x_7 = 0.6 \\ -2.6x_1 - 1.4x_2 - 0.3x_3 + 1.2x_4 + 0.8x_5 + 8.0x_6 + 1.5x_7 = 4.1 \\ 0.5x_1 + 0.3x_2 + 1.1x_3 - 1.3x_4 - 1.9x_5 + 0.6x_6 + 6.9x_7 = 3.1 \end{array} \right.$$

- a) $[-0.5076975, -0.12018884, 0.10645662, -0.23389883, 0.20504201, 0.25950791, 0.4655098]$
- b) $[-0.50745777, -0.11994911, 0.10669635, -0.2336591, 0.20528174, 0.25974764, 0.46574953]$
- c) $[-0.50736213, -0.11985347, 0.10679199, -0.23356346, 0.20537738, 0.25984328, 0.46584517]$
- d) $[-0.50794824, -0.12043958, 0.10620588, -0.23414957, 0.20479127, 0.25925717, 0.46525906]$
- e) $[-0.50935829, -0.12184963, 0.10479583, -0.23555962, 0.20338122, 0.25784712, 0.46384901]$
- f) $[-0.50822776, -0.1207191, 0.10592636, -0.23442909, 0.20451175, 0.25897765, 0.46497954]$

Aluno: BRUNO HENRIQUE COSTA SEIXAS

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-0.1, -1.9, -0.6, -1.7, -2.0, -3.4, 4.4]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 15.1x_1 + 0.7x_2 - 0.3x_3 + 2.6x_4 - 0.8x_5 - 0.7x_6 + 1.9x_7 = 0.4 \\ -1.2x_1 + 15.5x_2 + 1.8x_3 + 0.7x_4 - 1.1x_5 + 1.1x_6 - 2.1x_7 = -1.4 \\ 1.8x_1 + 1.5x_2 + 11.7x_3 + 1.7x_4 + 2.2x_5 + 1.8x_6 - 0.7x_7 = -4.5 \\ -1.4x_1 + 1.3x_2 + 2.2x_3 + 19.2x_4 - 3.0x_5 + 2.6x_6 + 2.7x_7 = -2.9 \\ -2.3x_1 + 2.1x_2 + 0.9x_3 + 1.0x_4 + 17.0x_5 + 0.1x_6 + 2.2x_7 = 2.0 \\ 0.0x_1 + 1.4x_2 + 0.9x_3 - 1.1x_4 + 0.7x_5 + 11.2x_6 - 1.7x_7 = -4.0 \\ -0.7x_1 - 0.7x_2 - 2.8x_3 - 1.5x_4 - 1.1x_5 - 1.9x_6 + 11.1x_7 = -4.9 \end{cases}$$

- a) $[0.07606968, -0.07106332, -0.41125937, 0.0823465, 0.23369255, -0.40723567, -0.58085242]$
- b) $[0.0759058, -0.0712272, -0.41142325, 0.08218262, 0.23352867, -0.40739955, -0.5810163]$
- c) $[0.07606762, -0.07106538, -0.41126143, 0.08234444, 0.23369049, -0.40723773, -0.58085448]$
- d) $[0.07609912, -0.07103388, -0.41122993, 0.08237594, 0.23372199, -0.40720623, -0.58082298]$
- e) $[0.07417681, -0.07295619, -0.41315224, 0.08045363, 0.23179968, -0.40912854, -0.58274529]$
- f) $[0.07585893, -0.07127407, -0.41147012, 0.08213575, 0.2334818, -0.40744642, -0.58106317]$

E04 — ANN0001 — CCI

Aluno: DEVAIR DENER DAROLT

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-3.4, 3.1, 2.7, -3.3, 1.7, 1.4, 1.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 12.5x_1 - 2.7x_2 - 0.9x_3 + 1.0x_4 + 2.9x_5 + 0.9x_6 + 2.8x_7 = -0.7 \\ 0.5x_1 + 14.6x_2 - 1.3x_3 - 1.4x_4 - 2.2x_5 + 0.4x_6 - 0.1x_7 = -1.9 \\ -0.5x_1 + 1.1x_2 + 17.7x_3 + 2.0x_4 - 2.3x_5 - 1.1x_6 - 2.6x_7 = -0.7 \\ 0.4x_1 - 2.3x_2 - 2.0x_3 + 8.9x_4 + 0.5x_5 + 1.3x_6 - 0.5x_7 = 0.4 \\ -0.9x_1 - 2.1x_2 + 1.3x_3 - 1.1x_4 + 10.1x_5 + 1.5x_6 - 2.7x_7 = -2.8 \\ -1.2x_1 - 0.2x_2 - 2.5x_3 - 0.8x_4 - 1.2x_5 + 6.5x_6 - 0.4x_7 = 0.8 \\ -1.0x_1 + 2.8x_2 + 0.1x_3 - 2.0x_4 + 1.2x_5 + 0.8x_6 + 10.4x_7 = -0.7 \end{array} \right.$$

- a) $[-0.03155742, -0.1812737, -0.06441462, -0.00025217, -0.30968634, 0.03063026, 0.01371962]$
- b) $[-0.03164644, -0.18136272, -0.06450364, -0.00034119, -0.30977536, 0.03054124, 0.0136306]$
- c) $[-0.03280317, -0.18251945, -0.06566037, -0.00149792, -0.31093209, 0.02938451, 0.01247387]$
- d) $[-0.03175075, -0.18146703, -0.06460795, -0.0004455, -0.30987967, 0.03043693, 0.01352629]$
- e) $[-0.03118316, -0.18089944, -0.06404036, 0.00012209, -0.30931208, 0.03100452, 0.01409388]$
- f) $[-0.0310361, -0.18075238, -0.0638933, 0.00026915, -0.30916502, 0.03115158, 0.01424094]$

E04 — ANN0001 — CCI

Aluno: ENDREW RAFAEL TREPTOW HANG

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [1.3, -1.0, -0.9, -4.2, -2.7, 0.2, 1.0]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 12.5x_1 + 2.0x_2 - 0.2x_3 + 0.2x_4 - 1.1x_5 - 1.7x_6 - 1.6x_7 = -0.4 \\ 0.0x_1 + 9.1x_2 + 2.1x_3 - 1.5x_4 - 0.2x_5 - 0.8x_6 + 0.6x_7 = -1.4 \\ -0.2x_1 - 0.9x_2 + 10.6x_3 - 0.8x_4 + 1.6x_5 + 0.0x_6 - 1.1x_7 = -3.1 \\ 1.8x_1 + 0.7x_2 - 1.5x_3 + 14.4x_4 + 1.9x_5 + 2.1x_6 + 0.1x_7 = 3.6 \\ -2.7x_1 + 2.2x_2 - 0.2x_3 + 1.9x_4 + 14.5x_5 + 0.7x_6 + 1.1x_7 = 2.3 \\ -2.0x_1 + 0.2x_2 - 1.7x_3 - 1.0x_4 + 2.9x_5 + 8.8x_6 - 0.7x_7 = -2.0 \\ 1.5x_1 - 0.7x_2 + 0.4x_3 - 2.8x_4 - 0.3x_5 - 1.1x_6 + 12.5x_7 = 0.9 \end{cases}$$

- a) $[-0.04056247, -0.07453148, -0.28644528, 0.25575605, 0.13222564, -0.29389466, 0.11779311]$
- b)** $[-0.04228373, -0.07625274, -0.28816654, 0.25403479, 0.13050438, -0.29561592, 0.11607185]$
- c) $[-0.04042797, -0.07439698, -0.28631078, 0.25589055, 0.13236014, -0.29376016, 0.11792761]$
- d) $[-0.04128228, -0.07525129, -0.28716509, 0.25503624, 0.13150583, -0.29461447, 0.1170733]$
- e) $[-0.04076655, -0.07473556, -0.28664936, 0.25555197, 0.13202156, -0.29409874, 0.11758903]$
- f) $[-0.04126005, -0.07522906, -0.28714286, 0.25505847, 0.13152806, -0.29459224, 0.11709553]$

Aluno: FILIPE DA SILVA DE OLIVEIRA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-1.7, -3.5, 0.1, 2.7, -2.4, -2.5, 4.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 7.8x_1 + 2.8x_2 + 1.9x_3 - 0.5x_4 + 0.5x_5 + 0.8x_6 + 0.4x_7 = 3.2 \\ -2.0x_1 + 8.8x_2 - 0.6x_3 - 0.5x_4 + 1.0x_5 + 1.4x_6 + 0.8x_7 = 4.0 \\ -1.3x_1 + 2.0x_2 + 16.9x_3 + 0.7x_4 - 2.5x_5 - 1.3x_6 + 2.5x_7 = 1.1 \\ 2.6x_1 + 1.5x_2 + 0.6x_3 + 10.8x_4 - 0.5x_5 + 2.5x_6 + 0.3x_7 = -4.1 \\ 1.6x_1 + 0.8x_2 + 1.2x_3 + 0.6x_4 + 9.2x_5 - 2.0x_6 - 1.5x_7 = 4.0 \\ -0.3x_1 - 2.7x_2 - 1.8x_3 + 1.6x_4 - 2.5x_5 + 16.9x_6 + 2.0x_7 = -0.1 \\ 1.8x_1 + 2.8x_2 + 1.3x_3 - 2.5x_4 - 2.0x_5 + 0.3x_6 + 12.3x_7 = -1.1 \end{array} \right.$$

- a) [0.15629377, 0.41934034, 0.16423056, -0.50747279, 0.38852257, 0.21987487, -0.26862248]
- b)** [0.15470461, 0.41775118, 0.1626414, -0.50906195, 0.38693341, 0.21828571, -0.27021164]
- c) [0.15577617, 0.41882274, 0.16371296, -0.50799039, 0.38800497, 0.21935727, -0.26914008]
- d) [0.15663562, 0.41968219, 0.16457241, -0.50713094, 0.38886442, 0.22021672, -0.26828063]
- e) [0.15615237, 0.41919894, 0.16408916, -0.50761419, 0.38838117, 0.21973347, -0.26876388]
- f) [0.15668912, 0.41973569, 0.16462591, -0.50707744, 0.38891792, 0.22027022, -0.26822713]

Aluno: FREDERICO MINUZZI

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-0.4, -4.3, -3.3, 3.7, 0.2, 4.6, 1.0]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 10.9x_1 - 1.5x_2 - 2.6x_3 + 0.5x_4 - 0.7x_5 - 1.5x_6 - 2.6x_7 = 2.5 \\ -1.0x_1 + 9.2x_2 + 2.3x_3 + 1.3x_4 + 2.0x_5 - 0.3x_6 + 0.0x_7 = -3.2 \\ -2.4x_1 - 2.7x_2 + 14.0x_3 + 2.3x_4 - 1.1x_5 + 0.6x_6 + 1.3x_7 = -4.7 \\ -1.4x_1 - 2.1x_2 - 2.2x_3 + 17.9x_4 - 2.4x_5 - 2.2x_6 - 0.4x_7 = -5.0 \\ 1.9x_1 + 2.0x_2 + 2.7x_3 + 1.4x_4 + 14.3x_5 + 1.5x_6 + 1.9x_7 = 1.1 \\ 2.5x_1 + 1.7x_2 + 2.8x_3 - 1.6x_4 - 0.2x_5 + 11.9x_6 + 2.5x_7 = -0.1 \\ 1.2x_1 + 1.7x_2 + 2.8x_3 + 1.3x_4 - 2.6x_5 - 1.0x_6 + 11.1x_7 = 0.6 \end{cases}$$

- a) [0.19680219, -0.23753467, -0.30297584, -0.30654509, 0.14863607, -0.02558559, 0.21670345]
- b)** [0.19481537, -0.23952149, -0.30496266, -0.30853191, 0.14664925, -0.02757241, 0.21471663]
- c) [0.19655757, -0.23777929, -0.30322046, -0.30678971, 0.14839145, -0.02583021, 0.21645883]
- d) [0.19634816, -0.2379887, -0.30342987, -0.30699912, 0.14818204, -0.02603962, 0.21624942]
- e) [0.19629995, -0.23803691, -0.30347808, -0.30704733, 0.14813383, -0.02608783, 0.21620121]
- f) [0.19596056, -0.2383763, -0.30381747, -0.30738672, 0.14779444, -0.02642722, 0.21586182]

Aluno: GUILHERME ARAÚJO LIRA DE MENEZES

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-1.3, -3.9, -4.0, -4.6, 0.7, 2.0, 1.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 8.5x_1 + 0.5x_2 - 2.0x_3 + 0.9x_4 + 0.9x_5 - 2.4x_6 + 0.3x_7 = 2.5 \\ 1.9x_1 + 13.5x_2 + 2.5x_3 - 1.7x_4 - 1.1x_5 - 1.1x_6 + 2.6x_7 = 1.8 \\ 1.2x_1 - 3.0x_2 + 12.9x_3 - 2.4x_4 - 1.4x_5 - 1.6x_6 - 1.1x_7 = -3.6 \\ -0.8x_1 + 2.0x_2 + 1.3x_3 + 10.9x_4 - 0.7x_5 + 2.6x_6 - 1.0x_7 = 1.6 \\ 1.5x_1 - 2.8x_2 - 1.8x_3 - 1.5x_4 + 15.1x_5 + 0.3x_6 + 1.5x_7 = -1.1 \\ 1.4x_1 + 1.9x_2 - 1.1x_3 + 0.0x_4 - 2.5x_5 + 10.8x_6 + 2.4x_7 = 0.4 \\ -1.3x_1 - 1.9x_2 + 0.3x_3 + 0.7x_4 - 2.7x_5 + 1.9x_6 + 11.5x_7 = 3.1 \end{cases}$$

a) $[0.17901378, 0.10508861, -0.23064017, 0.21806762, -0.1030884, -0.11628985, 0.29581806]$

b) $[0.17961485, 0.10568968, -0.2300391, 0.21866869, -0.10248733, -0.11568878, 0.29641913]$

c) $[0.17886318, 0.10493801, -0.23079077, 0.21791702, -0.103239, -0.11644045, 0.29566746]$

d) $[0.17780611, 0.10388094, -0.23184784, 0.21685995, -0.10429607, -0.11749752, 0.29461039]$

e) $[0.17972435, 0.10579918, -0.2299296, 0.21877819, -0.10237783, -0.11557928, 0.29652863]$

f) $[0.17915987, 0.1052347, -0.23049408, 0.21821371, -0.10294231, -0.11614376, 0.29596415]$

Aluno: GUILHERME LAFUENTE GONÇALVES

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-1.1, 0.2, 4.2, -0.5, 2.6, 1.6, -0.1]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 19.2x_1 + 2.0x_2 + 2.1x_3 + 1.8x_4 - 2.9x_5 + 2.3x_6 - 0.3x_7 = 3.2 \\ -2.4x_1 + 12.7x_2 + 2.7x_3 - 1.3x_4 - 1.4x_5 - 1.8x_6 - 2.5x_7 = 2.3 \\ -0.3x_1 + 0.8x_2 + 8.9x_3 + 0.5x_4 - 2.2x_5 - 2.3x_6 - 2.2x_7 = 0.3 \\ -2.3x_1 + 1.7x_2 + 0.1x_3 + 6.9x_4 - 0.6x_5 + 0.2x_6 - 1.6x_7 = -4.6 \\ 0.2x_1 + 0.4x_2 + 0.1x_3 + 0.5x_4 + 8.7x_5 - 2.5x_6 + 2.7x_7 = -0.3 \\ -0.3x_1 + 1.7x_2 + 2.0x_3 + 0.4x_4 + 1.6x_5 + 7.2x_6 - 0.6x_7 = 4.6 \\ -1.6x_1 - 1.9x_2 + 2.6x_3 - 1.1x_4 - 0.4x_5 - 1.4x_6 + 9.5x_7 = -4.1 \end{cases}$$

- a) $[0.17720995, 0.12735358, 0.17078389, -0.72762289, 0.27337932, 0.51176189, -0.41785845]$
- b) $[0.17699699, 0.12714062, 0.17057093, -0.72783585, 0.27316636, 0.51154893, -0.41807141]$
- c) $[0.17725909, 0.12740272, 0.17083303, -0.72757375, 0.27342846, 0.51181103, -0.41780931]$
- d) $[0.17762207, 0.1277657, 0.17119601, -0.72721077, 0.27379144, 0.51217401, -0.41744633]$
- e) $[0.17718335, 0.12732698, 0.17075729, -0.72764949, 0.27335272, 0.51173529, -0.41788505]$
- f) $[0.17589904, 0.12604267, 0.16947298, -0.7289338, 0.27206841, 0.51045098, -0.41916936]$

E04 — ANN0001 — CCI

Aluno: HENRIQUE WIPPEL PARUCKER DA SILVA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [2.2, 3.3, 2.6, 3.6, 2.7, 1.6, 1.8]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 12.4x_1 + 0.3x_2 - 1.4x_3 + 2.0x_4 - 1.7x_5 - 0.9x_6 + 0.4x_7 = 3.4 \\ 0.3x_1 + 18.0x_2 - 2.0x_3 - 2.7x_4 - 1.5x_5 + 1.3x_6 - 2.7x_7 = -2.0 \\ 0.0x_1 - 2.7x_2 + 15.0x_3 - 2.9x_4 + 1.8x_5 - 2.2x_6 + 0.0x_7 = 3.9 \\ 1.6x_1 - 2.4x_2 - 1.0x_3 + 14.4x_4 - 2.7x_5 - 1.2x_6 - 0.1x_7 = -4.4 \\ -1.5x_1 - 2.7x_2 + 0.2x_3 - 0.7x_4 + 16.5x_5 - 1.7x_6 + 2.8x_7 = 3.6 \\ 0.8x_1 + 1.1x_2 + 1.4x_3 - 0.2x_4 - 1.1x_5 + 7.4x_6 - 0.8x_7 = 1.7 \\ -2.8x_1 - 0.6x_2 - 2.5x_3 + 0.2x_4 + 2.1x_5 + 2.6x_6 + 14.7x_7 = -2.2 \end{cases}$$

- a) [0.39967095, -0.1528031, 0.17339127, -0.29927409, 0.25543496, 0.19508185, -0.11603861]
- b) [0.39849011, -0.15398394, 0.17221043, -0.30045493, 0.25425412, 0.19390101, -0.11721945]
- c) [0.39955697, -0.15291708, 0.17327729, -0.29938807, 0.25532098, 0.19496787, -0.11615259]
- d) [0.39952603, -0.15294802, 0.17324635, -0.29941901, 0.25529004, 0.19493693, -0.11618353]
- e) [0.40013776, -0.15233629, 0.17385808, -0.29880728, 0.25590177, 0.19554866, -0.1155718]
- f) [0.39976953, -0.15270452, 0.17348985, -0.29917551, 0.25553354, 0.19518043, -0.11594003]

Aluno: JOÃO GUILHERME PELIZZA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [0.4, 2.5, 2.4, 4.1, 1.7, 0.5, -1.4]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 17.4x_1 + 2.4x_2 + 2.0x_3 + 1.7x_4 - 1.7x_5 + 1.7x_6 - 2.5x_7 = 4.3 \\ 1.1x_1 + 16.8x_2 + 2.1x_3 + 1.7x_4 + 2.8x_5 - 1.5x_6 + 2.8x_7 = -1.9 \\ -1.6x_1 - 2.7x_2 + 11.6x_3 - 2.0x_4 + 0.8x_5 - 1.8x_6 + 2.1x_7 = 1.7 \\ 0.6x_1 + 1.2x_2 - 1.4x_3 + 13.1x_4 - 3.0x_5 + 1.8x_6 - 2.9x_7 = -3.6 \\ 1.3x_1 - 2.8x_2 + 0.4x_3 + 0.6x_4 + 9.5x_5 + 1.2x_6 - 2.0x_7 = 0.1 \\ 2.4x_1 + 0.3x_2 + 2.2x_3 - 1.9x_4 - 2.5x_5 + 12.7x_6 - 2.5x_7 = -1.0 \\ 1.2x_1 - 2.2x_2 + 0.1x_3 + 0.6x_4 - 0.8x_5 - 0.5x_6 + 10.8x_7 = 1.9 \end{cases}$$

- a) $[0.31311073, -0.14798276, 0.07296899, -0.22356298, -0.0187118, -0.16065859, 0.11531504]$
- b) $[0.31331878, -0.14777471, 0.07317704, -0.22335493, -0.01850375, -0.16045054, 0.11552309]$
- c) $[0.31335044, -0.14774305, 0.0732087, -0.22332327, -0.01847209, -0.16041888, 0.11555475]$
- d) $[0.31159345, -0.14950004, 0.07145171, -0.22508026, -0.02022908, -0.16217587, 0.11379776]$
- e) $[0.31322284, -0.14787065, 0.0730811, -0.22345087, -0.01859969, -0.16054648, 0.11542715]$
- f) $[0.31313452, -0.14795897, 0.07299278, -0.22353919, -0.01868801, -0.1606348, 0.11533883]$

Aluno: JOSÉ EDUARDO BRANDÃO

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [2.0, 4.9, -3.2, -0.8, -0.0, -1.6, -2.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 12.2x_1 + 2.5x_2 - 2.3x_3 + 1.2x_4 + 2.3x_5 - 0.8x_6 - 2.0x_7 = -3.5 \\ -0.5x_1 + 7.2x_2 - 0.5x_3 + 0.2x_4 - 0.9x_5 + 1.6x_6 + 1.1x_7 = 1.5 \\ -1.4x_1 - 1.8x_2 + 13.0x_3 - 0.7x_4 + 1.2x_5 + 2.7x_6 + 0.4x_7 = -3.7 \\ -1.3x_1 - 1.7x_2 - 2.8x_3 + 9.5x_4 - 1.5x_5 - 1.8x_6 + 0.0x_7 = 1.6 \\ 0.6x_1 + 2.2x_2 - 2.5x_3 - 0.8x_4 + 11.1x_5 + 0.7x_6 + 2.6x_7 = 1.6 \\ 0.4x_1 + 1.4x_2 + 2.1x_3 + 1.5x_4 + 1.2x_5 + 8.2x_6 + 0.3x_7 = 0.7 \\ -1.6x_1 + 1.3x_2 + 0.7x_3 + 0.0x_4 - 1.9x_5 + 0.8x_6 + 7.8x_7 = 2.6 \end{array} \right.$$

a) $[-0.3205666, 0.08700382, -0.34231405, 0.06866978, 0.00117595, 0.15380339, 0.26969106]$

b) $[-0.32190651, 0.08566391, -0.34365396, 0.06732987, -0.00016396, 0.15246348, 0.26835115]$

c) $[-0.32013344, 0.08743698, -0.34188089, 0.06910294, 0.00160911, 0.15423655, 0.27012422]$

d) $[-0.32035865, 0.08721177, -0.3421061, 0.06887773, 0.0013839, 0.15401134, 0.26989901]$

e) $[-0.31998363, 0.08758679, -0.34173108, 0.06925275, 0.00175892, 0.15438636, 0.27027403]$

f) $[-0.32011621, 0.08745421, -0.34186366, 0.06912017, 0.00162634, 0.15425378, 0.27014145]$

Aluno: LEONARDO DE CASTRO

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-1.5, -1.0, -2.9, -3.5, 0.4, 0.5, -2.5]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 10.9x_1 - 0.2x_2 + 3.0x_3 - 0.6x_4 + 2.2x_5 + 1.7x_6 + 0.3x_7 = 4.5 \\ -2.3x_1 + 9.7x_2 + 0.8x_3 + 0.7x_4 + 0.5x_5 - 2.0x_6 + 2.0x_7 = -4.2 \\ 1.8x_1 + 1.8x_2 + 12.2x_3 - 2.3x_4 - 1.1x_5 + 3.0x_6 - 0.9x_7 = -1.0 \\ -3.0x_1 - 2.7x_2 + 1.9x_3 + 14.0x_4 - 1.8x_5 + 0.5x_6 + 2.9x_7 = -0.6 \\ 1.5x_1 + 1.2x_2 - 2.1x_3 + 1.1x_4 + 11.6x_5 + 2.7x_6 + 0.3x_7 = 2.5 \\ 0.6x_1 - 0.7x_2 + 1.9x_3 + 1.0x_4 + 1.1x_5 + 7.0x_6 + 0.6x_7 = 1.7 \\ 2.6x_1 - 1.2x_2 + 3.0x_3 - 2.6x_4 + 0.6x_5 + 0.0x_6 + 14.8x_7 = -0.5 \end{cases}$$

- a) $[0.39831675, -0.272533, -0.13937813, 0.03764492, 0.11896826, 0.20701621, -0.09324401]$
- b) $[0.3987002, -0.27214955, -0.13899468, 0.03802837, 0.11935171, 0.20739966, -0.09286056]$
- c) $[0.39877695, -0.2720728, -0.13891793, 0.03810512, 0.11942846, 0.20747641, -0.09278381]$
- d) $[0.39811009, -0.27273966, -0.13958479, 0.03743826, 0.1187616, 0.20680955, -0.09345067]$
- e) $[0.39825651, -0.27259324, -0.13943837, 0.03758468, 0.11890802, 0.20695597, -0.09330425]$
- f)* $[0.39705045, -0.2737993, -0.14064443, 0.03637862, 0.11770196, 0.20574991, -0.09451031]$

Aluno: LEONARDO SILVA VASQUEZ RIBEIRO

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-2.4, -4.7, -4.7, -4.8, 0.7, 4.6, -2.9]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 9.5x_1 - 2.3x_2 + 0.2x_3 + 0.0x_4 - 2.8x_5 - 0.9x_6 - 1.5x_7 = 1.7 \\ -2.2x_1 + 12.9x_2 - 0.6x_3 + 0.5x_4 + 2.5x_5 + 0.8x_6 + 2.7x_7 = -0.8 \\ -0.8x_1 + 1.7x_2 + 10.3x_3 + 1.4x_4 - 2.1x_5 - 2.2x_6 + 1.7x_7 = 2.0 \\ 2.3x_1 - 0.8x_2 + 2.2x_3 + 14.4x_4 - 0.8x_5 + 2.8x_6 + 2.6x_7 = 3.3 \\ 0.7x_1 + 2.3x_2 + 0.3x_3 + 0.3x_4 + 9.8x_5 - 2.9x_6 + 1.3x_7 = -4.5 \\ -1.2x_1 - 2.8x_2 - 1.1x_3 + 2.7x_4 - 0.2x_5 + 9.9x_6 - 1.6x_7 = 2.5 \\ 2.2x_1 - 0.1x_2 - 1.2x_3 + 1.1x_4 - 2.5x_5 + 2.1x_6 + 11.0x_7 = 1.4 \end{array} \right.$$

- a) [0.08251821, 0.02400297, 0.15367878, 0.13018641, -0.40311611, 0.24052081, -0.02150915]
- b) [0.08277662, 0.02426138, 0.15393719, 0.13044482, -0.4028577, 0.24077922, -0.02125074]
- c) [0.08274517, 0.02422993, 0.15390574, 0.13041337, -0.40288915, 0.24074777, -0.02128219]
- d) [0.08224601, 0.02373077, 0.15340658, 0.12991421, -0.40338831, 0.24024861, -0.02178135]
- e) [0.080871, 0.02235576, 0.15203157, 0.1285392, -0.40476332, 0.2388736, -0.02315636]
- f) [0.08204862, 0.02353338, 0.15320919, 0.12971682, -0.4035857, 0.24005122, -0.02197874]

Aluno: LUCAS MATHEUS CAMILO VEIGA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-4.1, -0.0, -5.0, 0.8, 1.9, 4.3, 0.5]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 7.6x_1 - 0.8x_2 + 3.0x_3 + 2.0x_4 - 0.3x_5 - 0.1x_6 + 1.1x_7 = -1.6 \\ 2.2x_1 + 20.6x_2 - 2.4x_3 + 2.6x_4 + 2.9x_5 - 1.0x_6 - 2.6x_7 = -0.6 \\ -2.4x_1 + 1.3x_2 + 12.3x_3 - 0.3x_4 - 1.8x_5 - 2.9x_6 - 1.1x_7 = -3.6 \\ 2.9x_1 - 2.0x_2 + 0.2x_3 + 12.5x_4 + 0.9x_5 + 0.0x_6 - 2.6x_7 = 2.9 \\ -1.8x_1 + 2.2x_2 + 1.0x_3 + 2.5x_4 + 18.2x_5 - 2.2x_6 + 2.2x_7 = -1.9 \\ -0.4x_1 + 2.4x_2 - 0.3x_3 + 0.6x_4 + 0.1x_5 + 6.6x_6 - 0.1x_7 = -0.9 \\ 2.8x_1 + 2.2x_2 + 2.2x_3 + 1.5x_4 + 1.8x_5 + 1.6x_6 + 12.4x_7 = -1.3 \end{array} \right.$$

a) $[-0.15550987, -0.07289517, -0.36539336, 0.27832192, -0.14872329, -0.15685306, 0.01922774]$

b) $[-0.15678892, -0.07417422, -0.36667241, 0.27704287, -0.15000234, -0.15813211, 0.01794869]$

c) $[-0.15482503, -0.07221033, -0.36470852, 0.27900676, -0.14803845, -0.15616822, 0.01991258]$

d) $[-0.15494902, -0.07233432, -0.36483251, 0.27888277, -0.14816244, -0.15629221, 0.01978859]$

e) $[-0.15485691, -0.07224221, -0.3647404, 0.27897488, -0.14807033, -0.1562001, 0.0198807]$

f) $[-0.15540534, -0.07279064, -0.36528883, 0.27842645, -0.14861876, -0.15674853, 0.01933227]$

Aluno: LUCAS MENEGHELLI PEREIRA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [4.4, -0.5, -2.4, -1.8, -1.2, 0.7, -3.6]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 10.8x_1 + 0.1x_2 - 1.2x_3 + 1.9x_4 - 2.2x_5 + 2.1x_6 - 0.9x_7 = -4.5 \\ -2.3x_1 + 14.0x_2 - 2.8x_3 - 0.1x_4 + 1.9x_5 + 0.0x_6 + 0.3x_7 = 1.5 \\ 0.2x_1 - 1.5x_2 + 9.1x_3 - 2.0x_4 - 0.4x_5 - 3.0x_6 + 1.7x_7 = -4.6 \\ 1.8x_1 + 1.1x_2 + 2.1x_3 + 16.5x_4 + 0.5x_5 + 1.8x_6 - 2.0x_7 = -1.3 \\ 0.9x_1 + 1.4x_2 - 1.0x_3 + 0.1x_4 + 8.1x_5 - 0.2x_6 - 2.7x_7 = -2.0 \\ -2.7x_1 - 2.3x_2 + 2.7x_3 + 2.5x_4 + 0.2x_5 + 17.1x_6 - 2.8x_7 = -0.6 \\ 1.5x_1 - 1.1x_2 + 1.4x_3 - 1.6x_4 + 1.1x_5 - 0.3x_6 + 9.6x_7 = -2.4 \end{cases}$$

- a) $[-0.52840244, -0.04241665, -0.50747847, 0.0555134, -0.26386695, -0.05740764, -0.058807]$
b) $[-0.52999565, -0.04400986, -0.50907168, 0.05392019, -0.26546016, -0.05900085, -0.06040021]$
c) $[-0.52818253, -0.04219674, -0.50725856, 0.05573331, -0.26364704, -0.05718773, -0.05858709]$
d) $[-0.52837356, -0.04238777, -0.50744959, 0.05554228, -0.26383807, -0.05737876, -0.05877812]$
e) $[-0.52888729, -0.0429015, -0.50796332, 0.05502855, -0.2643518, -0.05789249, -0.05929185]$
f) $[-0.52809366, -0.04210787, -0.50716969, 0.05582218, -0.26355817, -0.05709886, -0.05849822]$

Aluno: MARCOS VALDECIR CAVALHEIRO JUNIOR

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-1.8, 2.7, 1.5, -4.3, -3.8, 2.1, -0.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 9.0x_1 + 0.1x_2 - 0.5x_3 - 2.0x_4 + 2.1x_5 + 2.6x_6 - 0.2x_7 = -1.6 \\ -1.9x_1 + 14.9x_2 + 2.4x_3 - 2.9x_4 - 2.5x_5 - 1.5x_6 - 1.0x_7 = -1.8 \\ 2.0x_1 + 0.5x_2 + 11.4x_3 + 1.3x_4 - 0.7x_5 - 2.7x_6 - 1.7x_7 = 0.2 \\ -0.3x_1 - 2.9x_2 - 1.4x_3 + 14.5x_4 + 2.2x_5 - 1.5x_6 - 2.9x_7 = 0.6 \\ 2.2x_1 - 3.0x_2 - 0.8x_3 + 0.8x_4 + 12.8x_5 + 0.5x_6 + 1.3x_7 = 2.5 \\ -0.1x_1 - 1.2x_2 - 0.8x_3 - 1.9x_4 - 1.2x_5 + 9.6x_6 + 2.1x_7 = 3.7 \\ 2.2x_1 - 2.5x_2 + 1.5x_3 + 0.7x_4 - 2.7x_5 - 2.8x_6 + 17.5x_7 = -3.5 \end{cases}$$

- a) $[-0.34065276, -0.11156239, 0.18595995, 0.02418391, 0.2309055, 0.43638144, -0.08332931]$
- b) $[-0.34079567, -0.1117053, 0.18581704, 0.024041, 0.23076259, 0.43623853, -0.08347222]$
- c) $[-0.34119062, -0.11210025, 0.18542209, 0.02364605, 0.23036764, 0.43584358, -0.08386717]$
- d) $[-0.34046541, -0.11137504, 0.1861473, 0.02437126, 0.23109285, 0.43656879, -0.08314196]$
- e) $[-0.34113691, -0.11204654, 0.1854758, 0.02369976, 0.23042135, 0.43589729, -0.08381346]$
- f) $[-0.34226757, -0.1131772, 0.18434514, 0.0225691, 0.22929069, 0.43476663, -0.08494412]$

Aluno: MATHEUS RAMBO DA ROZA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-2.6, 1.5, -0.7, -3.8, 4.5, -0.0, -1.0]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 12.9x_1 - 1.2x_2 + 1.8x_3 - 2.7x_4 - 1.3x_5 + 2.8x_6 - 0.1x_7 = 0.4 \\ 1.7x_1 + 16.3x_2 - 2.5x_3 - 2.1x_4 - 2.6x_5 + 1.7x_6 + 2.4x_7 = 4.8 \\ -1.9x_1 - 0.3x_2 + 13.5x_3 - 2.4x_4 + 0.9x_5 - 0.9x_6 - 2.3x_7 = 3.8 \\ 1.6x_1 - 1.2x_2 - 1.3x_3 + 13.8x_4 - 1.2x_5 + 0.7x_6 - 1.8x_7 = -1.8 \\ -1.6x_1 - 2.6x_2 - 0.2x_3 + 0.2x_4 + 12.5x_5 + 0.3x_6 + 2.8x_7 = 4.2 \\ 1.7x_1 - 0.6x_2 + 1.3x_3 + 1.9x_4 + 1.0x_5 + 11.2x_6 + 2.9x_7 = 2.3 \\ 1.9x_1 - 0.2x_2 + 0.7x_3 + 2.2x_4 - 1.3x_5 + 1.4x_6 + 13.4x_7 = 4.4 \end{cases}$$

- a) [0.04017744, 0.34047505, 0.33422316, -0.00222759, 0.34116316, 0.0633154, 0.33906632]
- b) [0.03994876, 0.34024637, 0.33399448, -0.00245627, 0.34093448, 0.06308672, 0.33883764]
- c) [0.04036106, 0.34065867, 0.33440678, -0.00204397, 0.34134678, 0.06349902, 0.33924994]
- d) [0.03875227, 0.33904988, 0.33279799, -0.00365276, 0.33973799, 0.06189023, 0.33764115]
- e) [0.0399879, 0.34028551, 0.33403362, -0.00241713, 0.34097362, 0.06312586, 0.33887678]
- f) [0.04031898, 0.34061659, 0.3343647, -0.00208605, 0.3413047, 0.06345694, 0.33920786]

Aluno: NILTON JOSÉ MOCELIN JÚNIOR

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-3.5, -3.5, -4.1, 3.6, 4.8, 2.7, 1.9]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 10.6x_1 - 2.4x_2 - 1.0x_3 - 2.4x_4 - 0.9x_5 + 0.0x_6 + 1.5x_7 = -1.6 \\ -1.7x_1 + 15.0x_2 - 2.5x_3 - 1.5x_4 + 2.0x_5 + 3.0x_6 + 0.4x_7 = -3.6 \\ -1.2x_1 - 0.4x_2 + 16.1x_3 - 1.8x_4 - 2.0x_5 + 2.4x_6 - 0.2x_7 = -4.0 \\ -1.0x_1 - 2.6x_2 + 2.9x_3 + 12.7x_4 + 1.1x_5 + 1.2x_6 - 2.4x_7 = -4.6 \\ 2.3x_1 - 1.9x_2 - 2.5x_3 - 1.6x_4 + 15.3x_5 - 2.3x_6 - 2.6x_7 = -2.3 \\ 1.0x_1 + 2.2x_2 - 2.7x_3 - 1.3x_4 - 0.8x_5 + 17.2x_6 + 1.1x_7 = -3.6 \\ 2.3x_1 - 2.7x_2 - 0.8x_3 + 1.7x_4 - 0.2x_5 + 0.8x_6 + 10.9x_7 = 4.1 \end{array} \right.$$

a) $[-0.37910973, -0.29554705, -0.29168527, -0.26684379, -0.17099233, -0.24879572, 0.41996303]$ b) $[-0.37930459, -0.29574191, -0.29188013, -0.26703865, -0.17118719, -0.24899058, 0.41976817]$ c) $[-0.37875443, -0.29519175, -0.29132997, -0.26648849, -0.17063703, -0.24844042, 0.42031833]$ d) $[-0.37914722, -0.29558454, -0.29172276, -0.26688128, -0.17102982, -0.24883321, 0.41992554]$ e) $[-0.38062066, -0.29705798, -0.2931962, -0.26835472, -0.17250326, -0.25030665, 0.4184521]$ f) $[-0.37871038, -0.2951477, -0.29128592, -0.26644444, -0.17059298, -0.24839637, 0.42036238]$

Aluno: PAULO ROBERTO ALBUQUERQUE

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-4.8, 3.9, 3.6, 3.2, -4.0, -1.7, -3.5]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 9.1x_1 + 1.0x_2 + 2.6x_3 + 2.1x_4 - 0.1x_5 + 0.4x_6 - 0.7x_7 = -2.0 \\ -0.8x_1 + 14.4x_2 + 2.8x_3 - 2.8x_4 + 1.5x_5 + 0.0x_6 + 2.6x_7 = 1.0 \\ 1.2x_1 - 1.9x_2 + 13.4x_3 + 1.3x_4 + 1.5x_5 - 0.4x_6 - 1.4x_7 = 1.4 \\ -1.3x_1 - 2.0x_2 - 3.0x_3 + 9.0x_4 + 0.7x_5 - 0.7x_6 - 1.0x_7 = -3.1 \\ 1.7x_1 + 1.7x_2 - 1.2x_3 - 2.5x_4 + 11.4x_5 + 0.5x_6 - 0.2x_7 = -0.5 \\ 2.5x_1 + 1.6x_2 + 0.3x_3 - 0.9x_4 + 2.3x_5 + 10.0x_6 - 0.2x_7 = 3.8 \\ 0.3x_1 - 0.8x_2 + 2.1x_3 - 1.0x_4 - 1.7x_5 + 0.6x_6 + 11.9x_7 = 1.8 \end{cases}$$

a) $[-0.21350608, -0.03459543, 0.17472092, -0.27824108, -0.06549376, 0.42743297, 0.07066168]$

b) $[-0.21498058, -0.03606993, 0.17324642, -0.27971558, -0.06696826, 0.42595847, 0.06918718]$

c) $[-0.21321318, -0.03430253, 0.17501382, -0.27794818, -0.06520086, 0.42772587, 0.07095458]$

d) $[-0.21355084, -0.03464019, 0.17467616, -0.27828584, -0.06553852, 0.42738821, 0.07061692]$

e) $[-0.21326643, -0.03435578, 0.17496057, -0.27800143, -0.06525411, 0.42767262, 0.07090133]$

f) $[-0.21325992, -0.03434927, 0.17496708, -0.27799492, -0.0652476, 0.42767913, 0.07090784]$

E04 — ANN0001 — CCI

Aluno: RAFAEL DE MELO BÖEGER

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [2.7, -3.0, -3.1, 2.7, 1.0, 4.2, -3.8]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 14.6x_1 + 1.0x_2 + 2.1x_3 - 1.9x_4 - 1.1x_5 + 2.2x_6 + 0.3x_7 = -3.1 \\ 1.4x_1 + 17.8x_2 - 1.3x_3 - 2.8x_4 + 1.0x_5 - 0.1x_6 + 2.5x_7 = 2.6 \\ -1.2x_1 - 0.3x_2 + 9.0x_3 + 2.6x_4 + 2.3x_5 - 0.7x_6 + 0.4x_7 = -0.6 \\ 0.6x_1 - 2.1x_2 - 2.8x_3 + 7.1x_4 - 0.6x_5 - 0.4x_6 + 0.3x_7 = -0.6 \\ 1.7x_1 - 2.3x_2 + 2.8x_3 + 0.7x_4 + 9.5x_5 - 0.5x_6 - 0.9x_7 = -1.6 \\ -0.7x_1 + 0.5x_2 + 1.8x_3 + 0.2x_4 + 3.0x_5 + 14.5x_6 + 2.3x_7 = -1.6 \\ 0.4x_1 - 1.5x_2 + 2.7x_3 + 2.8x_4 - 1.2x_5 + 1.6x_6 + 18.6x_7 = 3.9 \end{array} \right.$$

- a) $[-0.20774119, 0.11177792, -0.0716645, -0.08473461, -0.05892361, -0.14114651, 0.25630412]$
- b) $[-0.208003, 0.11151611, -0.07192631, -0.08499642, -0.05918542, -0.14140832, 0.25604231]$
- c) $[-0.20927609, 0.11024302, -0.0731994, -0.08626951, -0.06045851, -0.14268141, 0.25476922]$
- d) $[-0.20773725, 0.11178186, -0.07166056, -0.08473067, -0.05891967, -0.14114257, 0.25630806]$
- e) $[-0.2079674, 0.11155171, -0.07189071, -0.08496082, -0.05914982, -0.14137272, 0.25607791]$
- f) $[-0.2077441, 0.11177501, -0.07166741, -0.08473752, -0.05892652, -0.14114942, 0.25630121]$

Aluno: RAFAEL DOS SANTOS PEREIRA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-1.2, 0.1, 2.3, -4.6, -3.4, -0.6, -1.1]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 12.2x_1 - 0.6x_2 + 2.5x_3 + 2.0x_4 + 2.9x_5 + 2.5x_6 - 0.2x_7 = -4.7 \\ 1.8x_1 + 11.2x_2 - 1.0x_3 + 2.9x_4 + 1.9x_5 + 0.9x_6 + 2.3x_7 = -0.3 \\ -2.9x_1 + 1.1x_2 + 11.9x_3 - 0.8x_4 + 2.3x_5 + 0.9x_6 - 0.3x_7 = -0.5 \\ 2.6x_1 + 1.4x_2 + 0.9x_3 + 10.0x_4 - 1.4x_5 - 1.7x_6 + 1.2x_7 = 2.5 \\ 1.8x_1 - 0.5x_2 + 1.5x_3 + 0.9x_4 + 12.1x_5 + 2.6x_6 - 3.0x_7 = 2.9 \\ -2.4x_1 + 0.3x_2 - 1.0x_3 + 0.8x_4 + 0.2x_5 + 9.7x_6 + 0.5x_7 = 4.3 \\ 1.7x_1 - 2.7x_2 + 0.9x_3 + 1.8x_4 - 1.0x_5 + 2.6x_6 + 12.5x_7 = -4.2 \end{cases}$$

- a) $[-0.53013309, -0.06037555, -0.18710831, 0.52820871, 0.15010171, 0.269305, -0.38109578]$
- b) $[-0.53055944, -0.0608019, -0.18753466, 0.52778236, 0.14967536, 0.26887865, -0.38152213]$
- c) $[-0.53092177, -0.06116423, -0.18789699, 0.52742003, 0.14931303, 0.26851632, -0.38188446]$
- d) $[-0.53093536, -0.06117782, -0.18791058, 0.52740644, 0.14929944, 0.26850273, -0.38189805]$
- e) $[-0.53207828, -0.06232074, -0.1890535, 0.52626352, 0.14815652, 0.26735981, -0.38304097]$
- f) $[-0.53075094, -0.0609934, -0.18772616, 0.52759086, 0.14948386, 0.26868715, -0.38171363]$

E04 — ANN0001 — CCI

Aluno: ROBSON BERTHELSEN

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [2.1, 3.2, 4.5, 3.2, -2.1, 1.2, 2.8]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\left\{ \begin{array}{l} 8.7x_1 + 2.0x_2 + 2.2x_3 - 1.0x_4 + 0.8x_5 - 0.1x_6 + 2.3x_7 = -2.5 \\ 0.6x_1 + 5.8x_2 - 2.7x_3 - 0.4x_4 - 0.7x_5 - 0.4x_6 + 1.0x_7 = -4.7 \\ 2.2x_1 - 0.1x_2 + 10.0x_3 + 0.9x_4 - 0.9x_5 + 2.5x_6 + 2.4x_7 = -0.8 \\ -1.5x_1 + 2.5x_2 - 0.9x_3 + 11.8x_4 + 2.0x_5 + 1.5x_6 - 0.1x_7 = -2.7 \\ 0.3x_1 - 1.4x_2 - 1.3x_3 + 1.2x_4 + 9.9x_5 - 1.2x_6 - 2.7x_7 = -1.6 \\ -0.3x_1 + 2.1x_2 + 0.5x_3 + 2.9x_4 + 0.6x_5 + 7.1x_6 + 0.1x_7 = 3.8 \\ 2.7x_1 + 1.6x_2 - 1.9x_3 + 1.6x_4 - 2.9x_5 + 0.5x_6 + 20.2x_7 = -4.4 \end{array} \right.$$

- a) [0.06433534, -0.88207955, -0.2872395, -0.12621983, -0.26063295, 0.89617456, -0.23164028]
- b) [0.06601442, -0.88040047, -0.28556042, -0.12454075, -0.25895387, 0.89785364, -0.2299612]
- c) [0.06548921, -0.88092568, -0.28608563, -0.12506596, -0.25947908, 0.89732843, -0.23048641]
- d) [0.06578264, -0.88063225, -0.2857922, -0.12477253, -0.25918565, 0.89762186, -0.23019298]
- e) [0.06578891, -0.88062598, -0.28578593, -0.12476626, -0.25917938, 0.89762813, -0.23018671]
- f) [0.06632704, -0.88008785, -0.2852478, -0.12422813, -0.25864125, 0.89816626, -0.22964858]

E04 — ANN0001 — CCI

Aluno: THIAGO BRANDENBURG

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-0.5, 1.6, 3.0, -1.2, 2.7, -3.8, 1.3]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 12.1x_1 - 0.7x_2 - 2.5x_3 - 2.2x_4 - 3.0x_5 + 2.0x_6 - 0.7x_7 = 0.4 \\ 0.8x_1 + 9.8x_2 - 0.6x_3 + 1.2x_4 - 2.5x_5 + 2.5x_6 + 1.6x_7 = -0.5 \\ -0.8x_1 - 0.6x_2 + 6.5x_3 + 2.2x_4 - 0.2x_5 - 2.0x_6 + 0.5x_7 = 3.8 \\ -2.6x_1 + 1.7x_2 - 2.7x_3 + 11.0x_4 + 2.0x_5 - 1.5x_6 + 0.0x_7 = -2.9 \\ -2.1x_1 - 0.5x_2 + 1.6x_3 + 1.8x_4 + 12.0x_5 - 2.9x_6 - 2.5x_7 = 2.6 \\ -1.8x_1 + 2.7x_2 - 2.1x_3 + 0.9x_4 + 2.7x_5 + 19.2x_6 + 0.0x_7 = 4.5 \\ 2.6x_1 + 2.6x_2 + 2.7x_3 - 1.4x_4 - 0.7x_5 - 0.2x_6 + 11.2x_7 = 0.4 \end{cases}$$

- a) $[0.16440834, -0.01666423, 0.72803702, -0.03719486, 0.19296254, 0.30627685, -0.15975334]$
- b) $[0.16586653, -0.01520604, 0.72949521, -0.03573667, 0.19442073, 0.30773504, -0.15829515]$
- c) $[0.1661292, -0.01494337, 0.72975788, -0.035474, 0.1946834, 0.30799771, -0.15803248]$
- d) $[0.16632597, -0.0147466, 0.72995465, -0.03527723, 0.19488017, 0.30819448, -0.15783571]$
- e) $[0.16622095, -0.01485162, 0.72984963, -0.03538225, 0.19477515, 0.30808946, -0.15794073]$
- f) $[0.16610998, -0.01496259, 0.72973866, -0.03549322, 0.19466418, 0.30797849, -0.1580517]$

Aluno: THIAGO PIMENTA BARROS SILVA

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [3.8, -2.0, -2.5, 4.3, -2.6, -1.7, 4.9]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 15.5x_1 - 2.0x_2 - 2.5x_3 + 0.7x_4 + 2.6x_5 + 2.6x_6 - 2.4x_7 = 3.1 \\ 0.3x_1 + 14.7x_2 + 1.8x_3 + 0.5x_4 + 2.6x_5 + 0.9x_6 + 1.4x_7 = 2.5 \\ 2.6x_1 + 1.1x_2 + 10.0x_3 + 2.3x_4 - 1.2x_5 - 2.1x_6 + 0.2x_7 = 4.9 \\ 1.9x_1 - 0.9x_2 + 2.8x_3 + 9.6x_4 - 0.4x_5 + 0.1x_6 - 1.7x_7 = -3.6 \\ -0.5x_1 - 0.3x_2 + 1.0x_3 + 0.6x_4 + 10.0x_5 - 2.4x_6 - 2.5x_7 = 1.0 \\ -1.0x_1 - 0.7x_2 - 0.3x_3 - 1.2x_4 - 1.3x_5 + 7.4x_6 + 2.0x_7 = 3.8 \\ -1.0x_1 + 2.3x_2 - 2.1x_3 + 2.2x_4 - 0.4x_5 - 1.5x_6 + 15.2x_7 = -2.1 \end{cases}$$

- a) [0.24045269, 0.02273767, 0.69209845, -0.59594174, 0.2259601, 0.49023603, 0.112127]
- b) [0.23985311, 0.02213809, 0.69149887, -0.59654132, 0.22536052, 0.48963645, 0.11152742]
- c) [0.24037456, 0.02265954, 0.69202032, -0.59601987, 0.22588197, 0.4901579, 0.11204887]
- d) [0.24039856, 0.02268354, 0.69204432, -0.59599587, 0.22590597, 0.4901819, 0.11207287]
- e) [0.24001242, 0.0222974, 0.69165818, -0.59638201, 0.22551983, 0.48979576, 0.11168673]
- f)* [0.23862212, 0.0209071, 0.69026788, -0.59777231, 0.22412953, 0.48840546, 0.11029643]

Aluno: VINICIUS GASPARINI

Submeter até: 17/09/2019 23:59hs

Q1 Use o método iterativo de Jacobi, com estimativa inicial $X^{(1)} = [-4.9, 1.8, 3.8, -2.8, -2.6, 0.2, -2.0]$, para encontrar a aproximação $X^{(10)}$ da solução do sistema

$$\begin{cases} 7.6x_1 - 0.2x_2 - 0.6x_3 + 2.0x_4 - 1.3x_5 + 1.2x_6 + 2.3x_7 = -0.8 \\ -2.4x_1 + 18.0x_2 - 0.9x_3 + 2.7x_4 + 2.1x_5 - 2.0x_6 + 0.4x_7 = -1.6 \\ 0.3x_1 + 0.9x_2 + 16.8x_3 - 1.9x_4 + 1.3x_5 + 2.2x_6 - 1.5x_7 = -4.6 \\ -2.0x_1 - 1.2x_2 + 2.4x_3 + 11.8x_4 - 1.6x_5 - 1.6x_6 - 1.1x_7 = 0.8 \\ -1.8x_1 - 2.5x_2 + 2.4x_3 - 1.4x_4 + 13.1x_5 + 1.7x_6 - 2.7x_7 = 0.8 \\ -2.2x_1 + 1.8x_2 + 1.9x_3 - 0.6x_4 - 0.1x_5 + 10.0x_6 + 1.3x_7 = 4.6 \\ -1.5x_1 - 2.0x_2 + 2.5x_3 + 1.8x_4 + 0.7x_5 + 1.2x_6 + 12.1x_7 = 4.0 \end{cases}$$

a) $[-0.30831274, -0.12983022, -0.28214605, 0.15272215, 0.05835572, 0.44631762, 0.25962213]$

b) $[-0.30811264, -0.12963012, -0.28194595, 0.15292225, 0.05855582, 0.44651772, 0.25982223]$

c) $[-0.30957065, -0.13108813, -0.28340396, 0.15146424, 0.05709781, 0.44505971, 0.25836422]$

d) $[-0.30766391, -0.12918139, -0.28149722, 0.15337098, 0.05900455, 0.44696645, 0.26027096]$

e) $[-0.30773231, -0.12924979, -0.28156562, 0.15330258, 0.05893615, 0.44689805, 0.26020256]$

f) $[-0.3081442, -0.12966168, -0.28197751, 0.15289069, 0.05852426, 0.44648616, 0.25979067]$