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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) $[0.16145011, -0.38490504, 0.00976408, -0.13193824, -0.48994258]$
 $[0.15983751, -0.38651764, 0.00815148, -0.13355084, -0.49155518]$

CA. C:\Windows\system32\cmd.exe	CA. C:\Windows\system32\cmd.exe	CA. C:\Windows\system32\cmd.exe
<pre>Iteracao: 1 x1: -1.1186813116 x2: -0.1526883841 x3: 0.3965465426 x4: 0.2814353704 x5: -0.1233234406</pre>	<pre>Iteracao: 4 x1: 0.1576410383 x2: -0.3870637715 x3: 0.0085002454 x4: -0.1325100660 x5: -0.4912737608</pre>	<pre>Iteracao: 7 x1: 0.1598371714 x2: -0.3865203857 x3: 0.0081526395 x4: -0.1335510463 x5: -0.4915554523</pre>
<pre>Iteracao: 2 x1: 0.0524159297 x2: -0.3444473743 x3: 0.0841810480 x4: -0.0110657793 x5: -0.4576243758</pre>	<pre>Iteracao: 5 x1: 0.1599925011 x2: -0.3864528239 x3: 0.0081005786 x4: -0.1335207671 x5: -0.4915901423</pre>	<pre>Iteracao: 8 x1: 0.1598380357 x2: -0.3865174651 x3: 0.0081513124 x4: -0.1335510463 x5: -0.4915552735</pre>
<pre>Iteracao: 3 x1: 0.1579648405 x2: -0.3705505133 x3: 0.0017359823 x4: -0.1272647679 x5: -0.4897738397</pre>	<pre>Iteracao: 6 x1: 0.1598435938 x2: -0.3865176737 x3: 0.0081362836 x4: -0.1335631609 x5: -0.4915583730</pre>	<pre>Iteracao: 9 x1: 0.1598375142 x2: -0.3865176439 x3: 0.0081514837 x4: -0.1335508376 x5: -0.4915551841</pre>
<pre>Iteracao: 10 x1: 0.1598375440 x2: -0.3865176141 x3: 0.0081514781 x4: -0.1335508376 x5: -0.4915551841 C:\Users\mathe\Documents\Materias\ANN\cci_E05></pre>		