Nome: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_/\_\_\_\_\_\_/\_\_\_\_\_

1) Utilizando o método de Secante, determine a raiz da função: , considerando x(1)=0, x(2)=0.1, com .

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| i | x(i) | x(i+1) | x(i+2) | f(x(i)) | f(x(i+1)) |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |

2) Utilizando o método da bissecção, determine a raiz da função  , considerando o intervalo [0.5:2], com :

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| i | a | x | b | f(x) | f(a) | f(b) |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |

3) Resolva o sistema utilizando o método iterativo de Gauss-Seidel considerando as condições iniciais: .



Complete a tabela:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |