1-

Matriz escalonada:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [ | 9,0 | 3,0 | 5,0 | 1,0 | 0,0 | 5,0 | 6,0 | -5,0 | -3,0 | 4,0 | ] |
| [ | 0,0 | 8,7 | 7,4 | -1,1 | 3,0 | 8,4 | 8,3 | 5,6 | 3,3 | 4,5 | ] |
| [ | 0,0 | 0,0 | 7,1 | -4,4 | 4,1 | 1,1 | 4,6 | -1,7 | 2,3 | 1,4 | ] |
| [ | 0,0 | 0,0 | 0,0 | -8,0 | 9,4 | -1,2 | 3,0 | 3,7 | -2,1 | -2,1 | ] |
| [ | 0,0 | 0,0 | 0,0 | 0,0 | 1,2 | -8,5 | -8,1 | 1,3 | -6,1 | -3,9 | ] |
| [ | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 8,5 | -4,4 | 7,2 | 3,7 | 2,1 | ] |
| [ | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | -1,1 | 4,2 | -2,3 | 5,0 | ] |
| [ | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 1,1 | 3,7 | 2,0 | ] |
| [ | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 9,1 | -3,3 | ] |
| [ | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | -2,2 | ] |

Tabela Resultado:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N | x1 | x2 | x3 | x4 | x5 | x6 | x7 | x8 | x9 | x10 |
| 1 | 9,5555555556 | 4,9615384615 | 6,0871143376 | -5,3327656001 | -3,0008514281 | 5,1682489910 | 7,1463281953 | -7,9507814665 | -11,9245114289 | 65,1533112018 |
| 2 | -39,8719246695 | -44,4829011958 | -8,9233074884 | -31,4636987410 | 21,8227224411 | 4,6334638473 | 9,9290009787 | -15,3977274982 | 11,8215471645 | 65,1533112018 |
| 3 | -9,9277362381 | -43,1076370769 | -36,5327973231 | -10,2265482221 | 36,3157890265 | 2,1903640145 | 1,3357649145 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 4 | 5,4610258185 | -13,0064957041 | -39,4722569679 | 3,8550726822 | 29,5833151573 | 4,1908198470 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 5 | -3,6600643331 | -7,0991847968 | -33,0353157244 | -8,2415947542 | 29,0309186666 | 2,6602521755 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 6 | -7,0108569048 | -11,1009012387 | -33,2430022343 | -6,5320212213 | 27,9313525179 | 2,6602521755 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 7 | -5,7515226445 | -10,5199671911 | -32,4938265404 | -7,8240737797 | 27,9313525179 | 2,6602521755 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 8 | -6,2178146506 | -11,1800546790 | -32,5758988444 | -7,8240737797 | 27,9313525179 | 2,6602521755 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 9 | -5,9521897635 | -11,1095566742 | -32,5758988444 | -7,8240737797 | 27,9313525179 | 2,6602521755 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 10 | -5,9756890984 | -11,1095566742 | -32,5758988444 | -7,8240737797 | 27,9313525179 | 2,6602521755 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |
| 11 | -5,9756890984 | -11,1095566742 | -32,5758988444 | -7,8240737797 | 27,9313525179 | 2,6602521755 | -1,5976041850 | -22,9898401658 | 11,8215471645 | 65,1533112018 |

2-

Tabela Resultado:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N | x1 | x2 | x3 | x4 | x5 | x6 | x7 | x8 | x9 | x10 |
| 1 | -27,5000000000 | -14,3750000000 | -13,5937500000 | -34,3750000000 | -12,1875000000 | -10,1953125000 | -25,5468750000 | -15,1855468750 | -17,5463867188 | -24,4329833984 |
| 2 | -39,6875000000 | -23,8671875000 | -18,5156250000 | -40,4687500000 | -25,0195312500 | -18,4301757813 | -32,5512695313 | -23,3819580078 | -25,7037353516 | -28,5214233398 |
| 3 | -43,5839843750 | -29,2797851563 | -21,9274902344 | -44,6508789063 | -31,2280273438 | -22,8843688965 | -36,1524963379 | -27,4351501465 | -27,7391433716 | -30,0435733795 |
| 4 | -45,9826660156 | -32,2845458984 | -23,7922286987 | -46,8026733398 | -34,5310211182 | -25,1895999908 | -37,9915428162 | -28,9800715446 | -28,5059112310 | -30,6214956939 |
| 5 | -47,2718048096 | -33,8987636566 | -24,7720909119 | -47,9507064819 | -36,2576532364 | -26,2524539232 | -38,8094311953 | -29,6419490874 | -28,8158611953 | -30,8644525707 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 27 | -48,6685392368 | -35,5471983063 | -25,6809579619 | -49,1269588304 | -37,8392961858 | -27,1766335984 | -39,5063941079 | -30,1862802787 | -29,0620934231 | -31,0620934255 |
| 28 | -48,6685392842 | -35,5471983579 | -25,6809579891 | -49,1269588675 | -37,8392962329 | -27,1766336252 | -39,5063941279 | -30,1862802940 | -29,0620934299 | -31,0620934310 |
| 29 | -48,6685393064 | -35,5471983821 | -25,6809580018 | -49,1269588848 | -37,8392962550 | -27,1766336377 | -39,5063941373 | -30,1862803012 | -29,0620934330 | -31,0620934336 |
| 30 | -48,6685393167 | -35,5471983934 | -25,6809580078 | -49,1269588929 | -37,8392962653 | -27,1766336436 | -39,5063941416 | -30,1862803046 | -29,0620934345 | -31,0620934348 |
| 31 | -48,6685393216 | -35,5471983987 | -25,6809580106 | -49,1269588967 | -37,8392962702 | -27,1766336463 | -39,5063941437 | -30,1862803061 | -29,0620934352 | -31,0620934353 |
| 32 | -48,6685393238 | -35,5471984011 | -25,6809580119 | -49,1269588985 | -37,8392962724 | -27,1766336476 | -39,5063941446 | -30,1862803069 | -29,0620934356 | -31,0620934356 |

3-

4-

1. Tabela com resultado:

|  |  |  |  |
| --- | --- | --- | --- |
| N | x1 | x2 | x3 |
| 1 | 1,20000000000000 | 1,08000000000000 | 0,97200000000000 |
| 2 | 0,99480000000000 | 1,00332000000000 | 1,00018800000000 |
| 3 | 0,99964920000000 | 1,00001628000000 | 1,00003345199999 |
| 4 | 0,99999502680000 | 0,99999715212000 | 1,00000078210800 |
| 5 | 1,00000020657720 | 0,99999990113148 | 0,99999998922913 |
| 6 | 1,00000001096393 | 0,99999999998069 | 0,99999999890554 |
| 7 | 1,00000000011137 | 1,00000000009830 | 0,99999999997903 |
| 8 | 0,99999999999227 | 1,00000000000287 | 1,00000000000048 |
| 9 | 0,99999999999966 | 0,99999999999998 | 1,00000000000003 |

1. Tabela com resultado:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N | x1 | x2 | x3 | x4 |
| 1 | 0,2500000000 | 0,3125000000 | 0,3281250000 | 0,3320312500 |
| 2 | 0,3281250000 | 0,4140625000 | 0,4365234375 | 0,3591308594 |
| 3 | 0,3535156250 | 0,4475097656 | 0,4516601563 | 0,3629150391 |
| 4 | 0,3618774414 | 0,4533843994 | 0,4540748596 | 0,3635187149 |
| 5 | 0,3633460999 | 0,4543552399 | 0,4544684887 | 0,3636171222 |
| 6 | 0,3635888100 | 0,4545143247 | 0,4545328617 | 0,3636332154 |
| 7 | 0,3636285812 | 0,4545403607 | 0,4545433940 | 0,3636358485 |
| 8 | 0,3636350902 | 0,4545446211 | 0,4545451174 | 0,3636362793 |
| 9 | 0,3636361553 | 0,4545453182 | 0,4545453994 | 0,3636363498 |
| 10 | 0,3636363295 | 0,4545454322 | 0,4545454455 | 0,3636363614 |
| 11 | 0,3636363581 | 0,4545454509 | 0,4545454531 | 0,3636363633 |
| 12 | 0,3636363627 | 0,4545454539 | 0,4545454543 | 0,3636363636 |
| 13 | 0,3636363635 | 0,4545454544 | 0,4545454545 | 0,3636363636 |
| 14 | 0,3636363636 | 0,4545454545 | 0,4545454545 | 0,3636363636 |
| 15 | 0,3636363636 | 0,4545454545 | 0,4545454545 | 0,3636363636 |

1. Tabela com resultado:

NDA

5

B)

Valor obtido: 148.420000002

Valor real: 148.413159103