| | | | | S | ₩ | ,_ | | 7 | ~ | ~ | _ | | | رم | ~, | ~ | | | | | П |
|-------------------|------------|-------------------|---------------------|---------------------|----------------------|---------------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|----|
| Condición Inicial | b_i | $ x_{k+1} - x_k $ | 0.0061513858379981 | 0.00098568716893666 | 0.00015491514360544 | 2.4421242888373e-05 | 3.8479869344243e-06 | 6.0636230581057e-07 | 9.5548888023878e-08 | 1.5056356605925e-08 | 2.3725426068211e-09 | 3.7385927686984e-10 | 5.8911653333382e-11 | 9.2830187981008e-12 | 1.4627188349436e-12 | 2.3037127760972e-13 | 1.391258705652 | | | | |
| | | f_k | -0.0071296522431815 | 0.0011500151795475 | -0.00018055546890473 | 2.8467885067977e-05 | -4.4854900423285e-06 | 7.0682232491622e-07 | -1.1137902794873e-07 | 1.7550832536876e-08 | -2.7656157904719e-09 | 4.3579880084003e-10 | -6.8671932009343e-11 | 1.0820976433861e-11 | -1.7050933410272e-12 | 2.6851480614741e-13 | -4.2198658393629e-14 | | | | |
| | | x_k | -0.81 | -0.816151385838 | -0.81516569866906 | -0.81532061381267 | -0.81529619256978 | -0.81530004055671 | -0.81529943419441 | -0.8152995297433 | -0.81529951468694 | -0.81529951705948 | -0.81529951668562 | -0.81529951674453 | -0.81529951673525 | -0.81529951673671 | -0.81529951673648 | | | | |
| | α_i | $ x_{k+1}-x_k $ | 0.066417364622902 | 0.012803331517959 | 0.0019527380057091 | 0.00030932641702031 | 4.8702672985068e-05 | 7.6754426505676e-06 | 1.2094521049111e-06 | 1.9058302758168e-07 | 3.0031577447076e-08 | 4.7323005514244e-09 | 7.4570394303919e-10 | 1.1750611594863e-10 | 1.8516299604698e-11 | 2.9176661087149e-12 | 4.5974335449728e-13 | 0.78452767506872 | | | |
| | | f_k | -0.07187424423847 | 0.015089486810406 | -0.0022722005519605 | 0.00036067538721634 | -5.6769025135287e-05 | 8.9471409173326e-06 | -1.4098276441149e-06 | 2.2215808362584e-07 | -3.5007085624439e-08 | 5.516328795515e-09 | -8.6924919088266e-10 | 1.3697404812861e-10 | -2.1584066523191e-11 | 3.4010659345742e-12 | -5.3593512259557e-13 | 8.4397316787265e-14 | | | |
| | | ^{y}x | 92.0- | -0.8264173646229 | -0.81361403310494 | -0.81556677111065 | -0.81525744469363 | -0.81530614736662 | -0.81529847192397 | -0.81529968137607 | -0.81529949079304 | -0.81529952082462 | -0.81529951609232 | -0.81529951683802 | -0.81529951672052 | -0.81529951673903 | -0.81529951673612 | -0.81529951673658 | | | |
| | γ_i | $ x_{k+1}-x_k $ | 0.90909090909091 | 0.106590061313 | 0.014917871884157 | 0.0024505797799501 | 0.00038365800821183 | 6.0517906307567e-05 | 9.5347184018157e-06 | 1.5024951309783e-06 | 2.3675844307292e-07 | 3.7307821942889e-08 | 5.8788719448089e-09 | 9.263776412638e-10 | 1.459760090583e-10 | 2.3002488802604e-11 | 3.6246561307962e-12 | 5.7098770156472e-13 | 8.9817042692175e-14 | 2.4965052678236 | |
| | | f_k | -0.4 | 0.13020836229111 | -0.017142100934338 | 0.0028628734691351 | -0.00044706508788011 | 7.054813654601e-05 | -1.1114295503289e-05 | 1.7514247745957e-06 | -2.7598355575629e-07 | 4.3488830938355e-08 | -6.8528593689817e-09 | 1.0798561292282e-09 | -1.701606783101e-10 | 2.681341669567e-11 | -4.2252166778798e-12 | 6.6557134694074e-13 | -1.0470618120148e-13 | 1.6417345484554e-14 | |
| | | x_k | | -0.90909090909091 | -0.80250084777791 | -0.81741871966207 | -0.81496813988212 | -0.81535179789033 | -0.81529127998402 | -0.81530081470242 | -0.81529931220729 | -0.81529954896574 | -0.81529951165792 | -0.81529951753679 | -0.81529951661041 | -0.81529951675639 | -0.81529951673338 | -0.81529951673701 | -0.81529951673644 | -0.81529951673653 | |
| | β_i | $ x_{k+1}-x_k $ | 0.22099687473515 | 0.042955240382728 | 0.0076835774562825 | 0.0011868137702213 | 0.0001876110315101 | 2.9548475506624e-05 | 4.6565416748079e-06 | 7.3375696818534e-07 | 1.1562379875762e-07 | 1.8219700748112e-08 | 2.8710146482425e-09 | 4.5240733381746e-10 | 7.1289196768021e-11 | 1.1233569630065e-11 | 1.7701395904623e-12 | 2.7888802378584e-13 | 2.129442253854 | | |
| | | f_k | 0.25 | -0.047860495197067 | 0.0090171965639797 | -0.0013819449337619 | 0.0002187308432859 | -3.4443023196028e-05 | 5.4280414035977e-06 | -8.553222569661e-07 | 1.3477989171812e-07 | -2.1238265981698e-08 | 3.3466726007906e-09 | -5.2736028206458e-10 | 8.3100103278507e-11 | -1.3094717978302e-11 | 2.0633563024947e-12 | -3.2506344059409e-13 | 5.131940588505e-14 | | |
| | | x_k | -1 | -0.77900312526485 | -0.82195836564758 | -0.81427478819129 | -0.81546160196151 | -0.81527399093 | -0.81530353940551 | -0.81529888286384 | -0.8152996166208 | -0.81529950099701 | -0.81529951921671 | -0.81529951634569 | -0.8152995167981 | -0.81529951672681 | -0.81529951673804 | -0.81529951673627 | -0.81529951673655 | | |
| | | Iteración | 0 | 1 | 2 | 3 | 4 | ಬ | 9 | 7 | ∞ | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

Figure 1: Método de Newton, raíz 4