Problem 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| h | f1 Eq(1) | f2 Eq(1) | f1 Eq(2) | f2 Eq(2) |
| 0 | 1.49136 | 1.49136 | 0 | 0 |
| 1 | 0.478566 | 0.478567 | -2 | -1.99982 |
| 2 | -0.522734 | -0.522841 | -4 | -4.0206 |
| 3 | -1.52286 | -1.51005 | -6.00014 | -3.41854 |
| 4 | -2.52288 | -2.27241 | -8.06807 | -2.27241 |
| 5 | -3.5229 | -1.285 | -7.43267 | -1.285 |
| 6 | -4.53154 | -0.0889387 | -6.21799 | -0.0889387 |
| 7 | -5.81963 | 0.940612 | -5.42152 | 0.940612 |
| 8 | -4.6732 | 1.44397 | -4.6732 | 1.44397 |
| 9 | -4.6732 | 2.77815 | -4.6732 | 2.77815 |
| 10 | -2.56071 | 2.77815 | -2.56071 | 2.77815 |
| 11 | -1.01191 | 2.77815 | -1.01191 | 2.77815 |
| 12 | -0.574298 | 2.77815 | -0.574298 | 2.77815 |
| 13 | -0.574298 | 2.77815 | -0.574298 | 2.77815 |
| 14 | 1.56403 | 2.77815 | 1.56403 | 2.77815 |

Problem 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| h | Eq(3) | Eq(4) | Eq(5) | Eq(6) | Eq(7) |
| 0.0625 | 0.191406 | 0.0078125 | 0.0078125 | 2.04082 | 2.11765 |
| 0.03125 | 0.0947266 | 0.00195312 | 0.00195312 | 2.02062 | 2.06061 |
| 0.015625 | 0.0471191 | 0.00048828 | 0.00048828 | 2.01036 | 2.03077 |
| 0.0078125 | 0.0234985 | 0.00012207 | 0.00012207 | 2.00519 | 2.0155 |
| 0.00390625 | 0.011734 | 3.05E-05 | 3.05E-05 | 2.0026 | 2.00778 |
| 0.00195312 | 0.00586319 | 7.63E-06 | 7.63E-06 | 2.0013 | 2.0039 |
| 0.00097656 | 0.00293064 | 1.91E-06 | 1.91E-06 | 2.00065 | 2.00195 |
| 0.00048828 | 0.00146508 | 4.77E-07 | 4.77E-07 | 2.00033 | 2.00098 |
| 0.00024414 | 0.00073248 | 1.19E-07 | 1.19E-07 | 2.00016 | 2.00049 |
| 0.00012207 | 0.00036623 | 2.98E-08 | 2.98E-08 | 2.00008 | 2.00024 |
| 6.10E-05 | 0.00018311 | 7.45E-09 | 7.45E-09 | 2.00004 | 2.00012 |
| 3.05E-05 | 9.16E-05 | 1.86E-09 | 1.86E-09 | 2.00002 | 2.00006 |
| 1.53E-05 | 4.58E-05 | 4.66E-10 | 4.66E-10 | 2.00001 | 2.00003 |
| 7.63E-06 | 2.29E-05 | 1.16E-10 | 1.16E-10 | 2.00001 | 2.00002 |
| 3.81E-06 | 1.14E-05 | 0 | 0 | 2.00001 | 2.00001 |
| 1.91E-06 | 5.72E-06 | 0 | 0 | 2 | 2.00001 |
| 9.54E-07 | 2.86E-06 | 0 | 0 | 2 | 2 |
| 4.77E-07 | 1.43E-06 | 0 | 0 | 2 | 2 |
| 2.38E-07 | 7.15E-07 | 0 | 0 | 2 | 2 |
| 1.19E-07 | 3.58E-07 | 0 | 0 | 2 | 2 |
| 5.96E-08 | 1.79E-07 | 0 | 0 | 2 | 2 |
| 2.98E-08 | 8.94E-08 | 0 | 0 | 2 | 2 |
| 1.49E-08 | 4.47E-08 | 0 | 0 | 2 | 2 |
| 7.45E-09 | 2.98E-08 | 0 | 0 | 1.5 | 3 |
| 3.73E-09 | 0 | 0 | 0 | inf | 0.5 |
| 1.86E-09 | 0 | 0 | 0 | nan | inf |
| 9.31E-10 | 0 | 0 | 0 | nan | nan |
| 4.66E-10 | 0 | 0 | 0 | nan | nan |
| 2.33E-10 | 0 | 0 | 0 | nan | nan |
| 1.16E-10 | 0 | 0 | 0 | nan | nan |
| 5.82E-11 | 0 | 0 | 0 | nan | nan |
| 2.91E-11 | 0 | 0 | 0 | nan | nan |
| 1.46E-11 | 0 | 0 | 0 | nan | nan |
| 7.28E-12 | 0 | 0 | 0 | nan | nan |
| 3.64E-12 | 0 | 0 | 0 | nan | nan |
| 1.82E-12 | 0 | 0 | 0 | nan | nan |
| 9.09E-13 | 0 | 0 | 0 | nan | nan |