|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Bracket | Function 1 | | | Function 2 | | |
| Root | Function | # Of Ite | Root | Function | # Of Ite |
| [1.5, 2.5] | None | 𝑦 = 𝑥4 − 6𝑥 3 + 12𝑥 2 − 10𝑥 + 3 | 0 | None | 𝑥 3 − 7𝑥 2 + 15𝑥 − 9 | 0 |
| [0,1.5] | 1.0027348164704883 | 𝑦 = 𝑥4 − 6𝑥 3 + 12𝑥 2 − 10𝑥 + 3 | 100,000 | 1.0000000000000004 | 𝑥 3 − 7𝑥 2 + 15𝑥 − 9 | 60 |

Report: From the test cases that I have ran I do not see any correlation between number of iterations ran and accuracy. As from function 1 the maximum number of iterations were run through to get the same level of accuracy that Function 2 was able to get from only 20. However; when compared to the bisection method the Regula Falsi method has potential to be significantly faster and more accurate. Though you cannot always guarantee a root by using it.