Simple math problem

Test 1 – Example y=x

|  |  |  |  |
| --- | --- | --- | --- |
| Data | 50 | 20 |  |
| Data points x | x=10f \* (rand-.3f) | x=100f\*rand |  |
| Data point y | y = x ± rand | half y=x, y=x-rand |  |
| Evolutions run | >125 | 800 |  |
| Max Evolutions | 800 | 800 |  |
| Population Size | 1000 | 1000 |  |
| Max init depth | 4 | 4 |  |
| Max crossover depth | 8 | 8 |  |
| Time | 50s | 1.24 min |  |
| Fitness | 22.71 | 4.8 |  |
| Equation found | simplified: x | simplified: 0.9975\*x |  |

Test 2 – Example y=(1-x^2)^.5

|  |  |  |  |
| --- | --- | --- | --- |
| Data points |  |  |  |
| Evolutions |  |  |  |
| Max init depth |  |  |  |
| Max crossover depth |  |  |  |
| Time |  |  |  |

Test 1 – Example y=x^4+x^3+x^2-x

|  |  |  |  |
| --- | --- | --- | --- |
| Data points | 20, y = exact equation |  |  |
| Evolutions run | 800 |  |  |
| Max Evolutions | 800 |  |  |
| Population Size | 1000 |  |  |
| Max init depth | 4 |  |  |
| Max crossover depth | 8 |  |  |
| Time | 1.3 min |  |  |
| Fitness | 22.71 |  |  |
| Equation found | x^4+x^3+x^2 |  |  |

how to calculate complexity and take into account and print a x y error and complexity eg sin=2 exp=2