

Console

| r | x(r) | y(r) | z(r) |
|-----|-----------|-----------|-----------|
| 0. | 0. | 0. | 0. |
| 1. | 2.5 | 2.0909091 | 1.2272727 |
| 2. | 2.9772727 | 2.0289256 | 1.0041322 |
| 3. | 3.009814 | 1.9968069 | 0.9958912 |
| 4. | 2.9998298 | 1.9996884 | 1.000163 |
| 5. | 2.9998424 | 2.0000721 | 1.0000608 |
| 6. | 3.0000119 | 2.0000012 | 0.9999938 |
| 7. | 3.000002 | 1.9999987 | 0.9999993 |
| 8. | 2.9999997 | 2.0000001 | 1.0000001 |
| 9. | 3. | 2. | 1. |
| 10. | 3. | 2. | 1. |

After 9 iterations exact solution is:

x=2 y=2 z=1