| | Method | | | | | | | | | | | | | | | | |
|------------|--------|-----------|-------------|-----------------|-----------------|------------------|-----------|-------------------|-------|--|--|----------------|----------------|---------------------|------------------|------------------|-----|
| xample | Heun's | Half Step | | | | | | | | | | | | | | | |
| y' = x + y | | | | | | | | | | | | | | | | | |
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| | | | Mathematica | | | | | | | | | | | | | | |
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| | | | | | Method | | | | | | | | | | | | |
| | | | | Example | Heun's | Half Step | Step-size | Relative Error(%) | | | | | | | | | |
| | | | | (x^2+y^2+1)^1/3 | {5,16.216} | {5,16.1663} | | | 0.31% | | | | | | | | |
| | | | | (x^2+y^2+1)^1/3 | {5,16.3074} | {5, 16.3074} | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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| | | | Python | | | | | | | | | Relative error | | | | | |
| | | | | | | | | | | | | | (Measured - Ac | tual) / Actual x 10 | 0 Measured: Half | Sten: Heun: actu | ıal |
| | | | | | | | | | | | | | (| | | p,au dote | _ |
| | | | | | Method | | | | | | | | | | | | |
| | | | | Example | Heun's | Half Step | Step-size | Relative Error(%) | | | | | | | | | |
| | | | | | | {5, 16.16633355 | 10 | | 0.31% | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | (x^2+y^2+1)^1/3 | p, 1.03U/446/e^ | p, 1.030/4413e^1 | 1,000 | 1,000 0.000033% | | | | | | | | | |