

Using euler method

euler $-y^{(1/2)}/(4*\log(x + 1))$ $-y^{(1/2)}/(2*\log(x + 1))$

ans =

4.00000000
3.88902346
3.79016653
3.70062579
3.61848812
3.54238875
3.47131912
3.40451223
3.34137075
3.28142001
3.22427632
3.16962489
3.11720408
3.06679394
3.01820767
2.97128523
2.92588832
2.88189659
2.83920463
2.79771949
2.75735881
2.71804921
2.67972500
2.64232713
2.60580232
2.57010226
2.53518306

euler $-y^{(1/2)}/(4*\log(x + 1))$ $-y^{(1/2)}/(2*\log(x + 1))$

ans =

4.00000000
3.87977541
3.76795677
3.66335102
3.56500777
3.47215756
3.38416858
3.30051559
3.22075717
3.14451867
3.07147936
3.00136249
2.93392753

```
2.86896410
2.80628704
2.74573257
2.68715502
2.63042428
2.57542361
2.52204783
2.47020188
2.41979948
2.37076210
2.32301806
2.27650170
2.23115274
2.18691571
2.14373941
2.10157651
2.06038312
2.02011849
1.98074472
1.94222646
1.90453070
1.86762657
1.83148514
1.79607927
1.76138344
1.72737365
1.69402728
1.66132299
1.62924062
1.59776110
1.56686636
1.53653930
1.50676367
1.47752404
1.44880574
1.42059480
```

Using predictor correct method

```
euler -y^(1/2)/(4*log(x + 1))
```

```
-y^(1/2)/(2*log(x + 1))
```

ans =

```
4.00000000
3.71146099
3.49140570
3.30992793
3.15351479
3.01488048
2.88962994
2.77489682
```

```
2.66870115
2.56961357
2.47656548
```

```
euler -y^(1/2)/(4*log(x + 1))      -y^(1/2)/(2*log(x + 1))
```

```
ans =
```

```
4.00000000
3.51910165
3.15009980
2.84850941
2.59246628
2.36957729
2.17211669
1.99492846
1.83439019
1.68785281
1.55331579
1.42922793
1.31435971
```

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>>
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