

Falsa posición [4, 20], Es = 0.1%

Evaluacion de $f(c)=(gm/c)(1-\exp(-ct/m))-v$
En un intervalo [a,b]

Ingrese a:

4

Ingrese b:

20

Ingrese el error limite Es (%): 0.1

iter	a	b	f(a)	f(b)	Error (%)
0	4.000000	20.000000	34.190472	-8.3683844654	100.000000
1	4.000000	16.853906	34.190472	-3.6981472993	8.042771
2	4.000000	15.599291	34.190472	-1.5077099696	3.242321
3	4.000000	15.109396	34.190472	-0.5934193740	1.270308
4	4.000000	14.919868	34.190472	-0.2302586137	0.492017
5	4.000000	14.846819	34.190472	-0.0888467338	0.189715
6	4.000000	14.818705	34.190472	-0.0342078603	0.073024

Con bisección, mismos parámetros ([4, 20], Es=0.1%)

Evaluacion de $f(c)=(gm/c)(1-\exp(-ct/m))-v$
En un intervalo [a,b]

Ingrese a:

4

Ingrese b:

20

Ingrese el error limite Es (%): 0.1

iter	a	b	f(a)	f(b)	Error (%)
0	4.000000	20.000000	34.190472	-8.3683844654	100.000000
1	12.000000	20.000000	6.113943	-8.3683844654	25.000000
2	12.000000	16.000000	6.113943	-2.2302607061	14.285714
3	14.000000	16.000000	1.611116	-2.2302607061	6.666667
4	14.000000	15.000000	1.611116	-0.3844580607	3.448276
5	14.500000	15.000000	0.593698	-0.3844580607	1.694915
6	14.750000	15.000000	0.099830	-0.3844580607	0.840336
7	14.750000	14.875000	0.099830	-0.1434972439	0.421941
8	14.750000	14.812500	0.099830	-0.0221312061	0.211416
9	14.781250	14.812500	0.038775	-0.0221312061	0.105597
10	14.796875	14.812500	0.008303	-0.0221312061	0.052770

Falsa posición $x^{10} - 1$, $[0, 1.3]$, $Es = 0.1\%$

Evaluacion de $x^{10} - 1$
En un intervalo $[a,b]$

Ingrese a:

0

Ingrese b:

1.3

Ingrese el error limite Es (%): 0.1

iter	a	b	f(a)	f(b)	Error (%%)
0	0.000000	1.300000	-1.000000	12.7858491849	100.000000
1	0.094300	1.300000	-1.000000	12.7858491849	48.118299
2	0.181759	1.300000	-1.000000	12.7858491849	30.857040
3	0.262874	1.300000	-0.999998	12.7858491849	22.250800
4	0.338105	1.300000	-0.999980	12.7858491849	17.106298
5	0.407878	1.300000	-0.999873	12.7858491849	13.691820
6	0.472583	1.300000	-0.999444	12.7858491849	11.263907
7	0.532572	1.300000	-0.998164	12.7858491849	9.448877
8	0.588145	1.300000	-0.995047	12.7858491849	8.036883
9	0.639544	1.300000	-0.988553	12.7858491849	6.900017
10	0.686943	1.300000	-0.976600	12.7858491849	5.955710
11	0.730446	1.300000	-0.956760	12.7858491849	5.148990
12	0.770099	1.300000	-0.926639	12.7858491849	4.443285
13	0.805908	1.300000	-0.884428	12.7858491849	3.815178
14	0.837874	1.300000	-0.829476	12.7858491849	3.250906
15	0.866028	1.300000	-0.762689	12.7858491849	2.743495
16	0.890457	1.300000	-0.686577	12.7858491849	2.290170
17	0.911328	1.300000	-0.604862	12.7858491849	1.890054
18	0.928885	1.300000	-0.521791	12.7858491849	1.542381
19	0.943436	1.300000	-0.441369	12.7858491849	1.245420
20	0.955334	1.300000	-0.366783	12.7858491849	0.996077
21	0.964946	1.300000	-0.300113	12.7858491849	0.790035
22	0.972630	1.300000	-0.242338	12.7858491849	0.622185
23	0.978719	1.300000	-0.193544	12.7858491849	0.487114
24	0.983510	1.300000	-0.153187	12.7858491849	0.379533
25	0.987257	1.300000	-0.120366	12.7858491849	0.294566
26	0.990174	1.300000	-0.094031	12.7858491849	0.227915
27	0.992436	1.300000	-0.073121	12.7858491849	0.175916
28	0.994184	1.300000	-0.056657	12.7858491849	0.135521
29	0.995534	1.300000	-0.043777	12.7858491849	0.104246
30	0.996573	1.300000	-0.033751	12.7858491849	0.080096

Bisección $x^{10} - 1$, $[0, 1.3]$, $Es = 0.1\%$

Evaluacion de $x^{10} - 1$

En un intervalo $[a,b]$

Ingrese a:

0

Ingrese b:

1.3

Ingrese el error limite Es (%): 0.1

iter	a	b	f(a)	f(b)	Error (%%)
0	0.000000	1.300000	-1.000000	12.7858491849	100.000000
1	0.650000	1.300000	-0.986537	12.7858491849	33.333333
2	0.975000	1.300000	-0.223670	12.7858491849	14.285714
3	0.975000	1.137500	-0.223670	2.6267202172	7.692308
4	0.975000	1.056250	-0.223670	0.7284913861	4.000000
5	0.975000	1.015625	-0.223670	0.1677068465	2.040816
6	0.995313	1.015625	-0.045898	0.1677068465	1.010101
7	0.995313	1.005469	-0.045898	0.0560531409	0.507614
8	0.995313	1.000391	-0.045898	0.0039131236	0.254453
9	0.997852	1.000391	-0.021278	0.0039131236	0.127065
10	0.999121	1.000391	-0.008754	0.0039131236	0.063492