## BHAVESH SHRIMALI

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Table of Iterations: Problem #2					
Iteration count	d <sub>step</sub> i(cm)	$  \mathbf{R}_{\text{step}}^{i}  (\mathbf{N})$	ΔR		
0	6.67x10-3	2x104			
1	1.333x10-2	6600	6597		
2	1.553x10-2	4356	4353		
3	1.6985x10-2	2874.96	2871.96		
4	1.7944x10-2	1897.13	1894.13		
5	1.857637x10-2	1252.1026	1249.103		
6	1.89937x10-2	826.426	823.426		
7	1.9269x10-2	545.62	542.62		

## **Solution3:**

## **Modified Newton-Method**

Iteration	d <sub>step</sub> i(cm)	$  \mathbf{R_{step}}^{\mathbf{i}}  (\mathbf{N})$	Δ R (N)
count	-	-	, ,
1	0.013333333	6600	
2	0.015533333	4356	-2244
3	0.016985333	2874.96	-1481.04
4	0.017943653	1897.4736	-977.4864
5	0.018576145	1252.332576	-645.141024
6	0.018993589	826.5395002	-425.7930758
7	0.019269102	545.5160701	-281.0234301
8	0.019450941	360.0406063	-185.4754638
9	0.019570954	237.6268001	-122.4138061
10	0.019650163	156.8336881	-80.79311205
11	0.019702441	103.5102341	-53.32345395
12	0.019736944	68.31675453	-35.19347961
13	0.019759717	45.08905799	-23.22769654
14	0.019774746	29.75877827	-15.33027972
15	0.019784666	19.64079366	-10.11798461
16	0.019791213	12.96292382	-6.677869845
17	0.019795534	8.555529719	-4.407394098
18	0.019798386	5.646649614	-2.908880104
19	0.019800268	3.726788745	-1.919860869
20	0.01980151	2.459680572	-1.267108173

21	0.01980233	1.623389178	-0.836291394
22	0.019802871	1.071436857	-0.55195232
23	0.019803228	0.707148326	-0.364288531
24	0.019803464	0.466717895	-0.240430431
25	0.01980362	0.308033811	-0.158684084
26	0.019803722	0.203302315	-0.104731496
27	0.01980379	0.134179528	-0.069122787
28	0.019803835	0.088558488	-0.04562104
29	0.019803864	0.058448602	-0.030109886
30	0.019803884	0.038576078	-0.019872525
31	0.019803897	0.025460211	-0.013115866
32	0.019803905	0.016803739	-0.008656472
33	0.019803911	0.011090468	-0.005713271
34	0.019803914	0.007319709	-0.003770759
35	0.019803917	0.004831008	-0.002488701
36	0.019803918	0.003188465	-0.001642543
37	0.01980392	0.002104387	-0.001084078
38	0.01980392	0.001388895	-0.000715492
39	0.019803921	0.000916671	-0.000472224
40	0.019803921	0.000605003	-0.000311668
41	0.019803921	0.000399302	-0.000205701
42	0.019803921	0.000263539	-0.000135763
43	0.019803921	0.000173936	-8.96033E-05
44	0.019803921	0.000114798	-5.91382E-05
45	0.019803921	7.58E-05	-3.90312E-05
46	0.019803922	5.00E-05	-2.57606E-05
47	0.019803922	3.30E-05	-1.7002E-05
48	0.019803922	2.18E-05	-1.12213E-05
49	0.019803922	1.44E-05	-7.40607E-06
50	0.019803922	9.49E-06	-4.888E-06
51	0.019803922	6.26E-06	-3.22609E-06
52	0.019803922	4.13E-06	-2.12922E-06
53	0.019803922	2.73E-06	-1.40528E-06
54	0.019803922	1.80E-06	-9.27488E-07
55	0.019803922	1.19E-06	-6.12148E-07
56	0.019803922	7.84E-07	-4.04005E-07
57	0.019803922	5.18E-07	-2.66649E-07
58	0.019803922	3.42E-07	-1.75991E-07
59	0.019803922	2.25E-07	-1.16146E-07
60	0.019803922	1.49E-07	-7.66668E-08
61	0.019803922	9.82E-08	-5.05897E-08

62	0.019803922	6.48E-08	-3.33894E-08
63	0.019803922	4.28E-08	-2.20462E-08
64	0.019803922	2.82E-08	-1.45446E-08
65	0.019803922	1.86E-08	-9.60426E-09
66	0.019803922	1.23E-08	-6.33736E-09
67	0.019803922	8.12E-09	-4.1764E-09
68	0.019803922	5.36E-09	-2.75759E-09