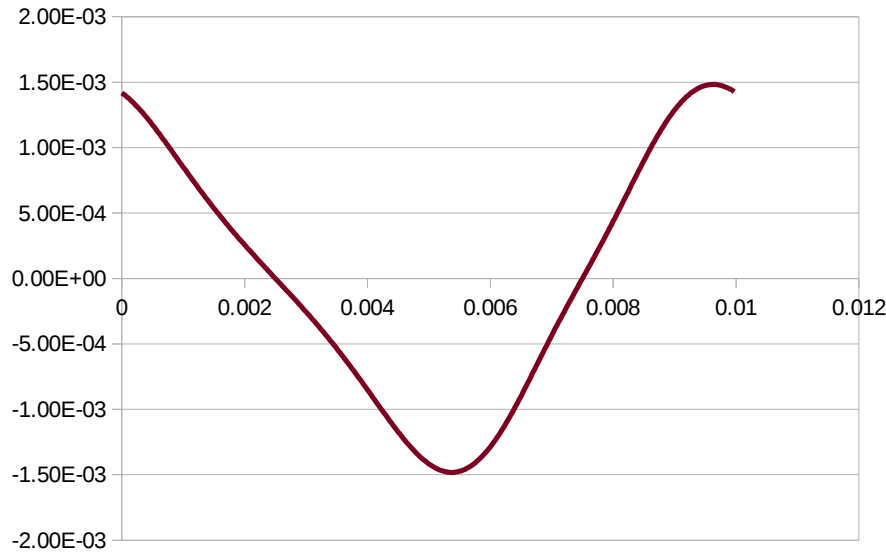


V(x,y)

Magnetic field around string	B_0	0.1 T	(1000G = 0.1T)
Ferromagnetic string radius	a	0.000127 m	
Rectangular coil side length in the z direction (along the string)	wz	0.01 m	
Rectangular coil side length in the x direction (along the fret)	wx	0.01 m	
Ferromagnetic string relative permeability	urel	100 -	(carbon steel: 100; all values much greater than 1 will produce almost th
Maximum horizontal displacement of the string relative to its rest position	xpk	0.001 m	
Distance from string axis to coil plane	h	0.004 m	
Maximum vertical displacement of the string relative to its rest position	ypk	0.003 m	
Frequency of string vibration	f	100 Hz	(E2: 440/(2^(29/12)) = 82.4 Hz)

$$V(\text{original}) = B_0 \cdot a^2 \cdot w^2 \cdot \frac{\mu_{rel} - 1}{\mu_{rel} + 1} \cdot \left[ \frac{2 \cdot x \cdot x \cdot [3 \cdot (y+h)^4 + 2 \cdot (x^2 + w^2/4) \cdot (y+h)^2 - (x^2 - w^2/4)^2] + y \cdot [2 \cdot (y+h)^5 - 4 \cdot (x^2 - w^2/4) \cdot (y+h)^3 + (6 \cdot x^4 - x^2 \cdot w^2/2 - w^4/8) \cdot (y+h)]}{[(x^2 - w^2/4)^2 + 2 \cdot (x^2 + w^2/4) \cdot (y+h)^2 + (y+h)^4]^2} \right]$$

$$V(\text{revised}) = B_0 \cdot a^2 \cdot w_z \cdot w_x \cdot \frac{\mu_{rel} - 1}{\mu_{rel} + 1} \cdot \left[ \frac{2 \cdot x \cdot x \cdot [3 \cdot (y+h)^4 + 2 \cdot (x^2 + w_x^2/4) \cdot (y+h)^2 - (x^2 - w_x^2/4)^2] + y \cdot [2 \cdot (y+h)^5 - 4 \cdot (x^2 - w_x^2/4) \cdot (y+h)^3 - (6 \cdot x^4 - x^2 \cdot w_x^2 - w_x^4/8) \cdot (y+h)]}{[(x^2 - w_x^2/4)^2 + 2 \cdot (x^2 + w_x^2/4) \cdot (y+h)^2 + (y+h)^4]^2} \right]$$



t [s]	y [m]	dy / dt [m / s]	x [m]	dx / dt [m / s]	V [V]	N [-]	V * N [V]
0	0	0	1.88495592	0	0.628318531	1.42E-06	1000 0.001418223
1	2.7778E-005	5.2357E-005	1.884668504	1.7452E-005	0.628222835	1.41E-06	1000 0.00140867
2	5.5556E-005	0.000104698	1.883807328	3.4899E-005	0.627935776	1.40E-06	1000 0.001398536
3	8.3333E-005	0.000157008	1.882372326	0.000052336	0.627457442	1.39E-06	1000 0.00138784
4	0.000111111	0.000209269	1.880363935	6.9756E-005	0.626787978	1.38E-06	1000 0.001376602
5	0.000138889	0.000261467	1.877782767	8.7156E-005	0.625927589	1.36E-06	1000 0.001364841
6	0.000166667	0.000313585	1.874629608	0.000104528	0.624876536	1.35E-06	1000 0.001352577
7	0.000194444	0.000365608	1.870905419	0.000121869	0.62363514	1.34E-06	1000 0.00133983
8	0.000222222	0.000417519	1.866611334	0.000139173	0.622203778	1.33E-06	1000 0.001326622
9	0.00025	0.000469303	1.861748661	0.000156434	0.620582887	1.31E-06	1000 0.001312973
0	0.000277778	0.000520945	1.856318881	0.000173648	0.61877296	1.30E-06	1000 0.001298905
1	0.000305556	0.000572427	1.850323649	0.000190809	0.61677455	1.28E-06	1000 0.001284439
2	0.000333333	0.000623735	1.84376479	0.000207912	0.614588263	1.27E-06	1000 0.001269597
3	0.000361111	0.000674853	1.836644302	0.000224951	0.612214767	1.25E-06	1000 0.001254399
4	0.000388889	0.000725766	1.828964355	0.000241922	0.609654785	1.24E-06	1000 0.001238868
5	0.000416667	0.000776457	1.820727288	0.000258819	0.606909096	1.22E-06	1000 0.001223023
6	0.000444444	0.000826912	1.811935609	0.000275637	0.603978536	1.21E-06	1000 0.001206887
7	0.000472222	0.000877115	1.802591998	0.000292372	0.600863999	1.19E-06	1000 0.00119048
18	0.0005	0.000927051	1.792699299	0.000309017	0.597566433	1.17E-06	1000 0.001173822
19	0.000527778	0.000976704	1.782260527	0.000325568	0.594086842	1.16E-06	1000 0.001156934
20	0.000555556	0.00102606	1.77127886	0.00034202	0.590426287	1.14E-06	1000 0.001139835
21	0.000583333	0.001075104	1.759757646	0.000358368	0.586585882	1.12E-06	1000 0.001122544
22	0.000611111	0.00112382	1.747700392	0.000374607	0.582566797	1.11E-06	1000 0.001105081
23	0.000638889	0.001172193	1.735110771	0.000390731	0.578370257	1.09E-06	1000 0.001087463
24	0.000666667	0.00122021	1.721992619	0.000406737	0.57399754	1.07E-06	1000 0.001069709

V(x,y)

25	0.000694444	0.001267855	1.708349931	0.000422618	0.569449977	1.05E-06	1000	0.001051835
26	0.000722222	0.001315113	1.694186864	0.000438371	0.564728955	1.03E-06	1000	0.001033859
27	0.00075	0.001361971	1.67950773	0.00045399	0.55983591	1.02E-06	1000	0.001015796
28	0.000777778	0.001408415	1.664317003	0.000469472	0.554772334	9.98E-07	1000	0.000997661
29	0.000805556	0.001454429	1.648619308	0.00048481	0.549539769	9.79E-07	1000	0.000979471
30	0.000833333	0.0015	1.632419428	0.0005	0.544139809	9.61E-07	1000	0.000961238
31	0.000861111	0.001545114	1.615722297	0.000515038	0.538574099	9.43E-07	1000	0.000942976
32	0.000888889	0.001589758	1.598533001	0.000529919	0.532844334	9.25E-07	1000	0.000924699
33	0.000916667	0.001633917	1.580856777	0.000544639	0.526952259	9.06E-07	1000	0.000906418
34	0.000944444	0.001677579	1.562699008	0.000559193	0.520899669	8.88E-07	1000	0.000888145
35	0.000972222	0.001720729	1.544065227	0.000573576	0.514688409	8.70E-07	1000	0.00086989
36	0.001	0.001763356	1.524961108	0.000587785	0.508320369	8.52E-07	1000	0.000851665
37	0.001027778	0.001805445	1.505392471	0.000601815	0.50179749	8.33E-07	1000	0.000833478
38	0.001055556	0.001846984	1.485365277	0.000615661	0.495121759	8.15E-07	1000	0.000815339
39	0.001083333	0.001887961	1.464885626	0.00062932	0.488295209	7.97E-07	1000	0.000797256
40	0.001111111	0.001928363	1.443959757	0.000642788	0.481319919	7.79E-07	1000	0.000779236
41	0.001138889	0.001968177	1.422594044	0.000656059	0.474198015	7.61E-07	1000	0.000761287
42	0.001166667	0.002007392	1.400794995	0.000669131	0.466931665	7.43E-07	1000	0.000743415
43	0.001194444	0.002045995	1.37856925	0.000681998	0.459523083	7.26E-07	1000	0.000725627
44	0.001222222	0.002083975	1.355923579	0.000694658	0.451974526	7.08E-07	1000	0.000707927
45	0.00125	0.00212132	1.332864881	0.000707107	0.444288294	6.90E-07	1000	0.000690321
46	0.001277778	0.002158019	1.30940018	0.00071934	0.436466727	6.73E-07	1000	0.000672812
47	0.001305556	0.002194061	1.285536623	0.000731354	0.428512208	6.55E-07	1000	0.000655405
48	0.001333333	0.002229434	1.261281478	0.000743145	0.420427159	6.38E-07	1000	0.000638103
49	0.001361111	0.002264129	1.236642135	0.00075471	0.412214045	6.21E-07	1000	0.000620909
50	0.001388889	0.002298133	1.211626099	0.000766044	0.403875366	6.04E-07	1000	0.000603825
51	0.001416667	0.002331438	1.18624099	0.000777146	0.395413663	5.87E-07	1000	0.000586854
52	0.001444444	0.002364032	1.160494541	0.000788011	0.386831514	5.70E-07	1000	0.000569996
53	0.001472222	0.002395907	1.134394593	0.000798636	0.378131531	5.53E-07	1000	0.000553253
54	0.0015	0.002427051	1.107949098	0.000809017	0.369316366	5.37E-07	1000	0.000536625
55	0.001527778	0.002457456	1.081166111	0.000819152	0.360388704	5.20E-07	1000	0.000520114
56	0.001555556	0.002487113	1.05405379	0.000829038	0.351351263	5.04E-07	1000	0.000503719
57	0.001583333	0.002516012	1.026620395	0.000838671	0.342206798	4.87E-07	1000	0.00048744
58	0.001611111	0.002544144	0.998874281	0.000848048	0.332958094	4.71E-07	1000	0.000471276
59	0.001638889	0.002571502	0.970823899	0.000857167	0.323607966	4.55E-07	1000	0.000455227
60	0.001666667	0.002598076	0.942477796	0.000866025	0.314159265	4.39E-07	1000	0.00043929
61	0.001694444	0.002623859	0.913844605	0.00087462	0.304614868	4.23E-07	1000	0.000423466
62	0.001722222	0.002648843	0.884933048	0.000882948	0.294977683	4.08E-07	1000	0.000407751
63	0.00175	0.00267302	0.855751931	0.000891007	0.285250644	3.92E-07	1000	0.000392145
64	0.001777778	0.002696382	0.826310145	0.000898794	0.275436715	3.77E-07	1000	0.000376645
65	0.001805556	0.002718923	0.796616656	0.000906308	0.265538885	3.61E-07	1000	0.000361248
66	0.001833333	0.002740636	0.76668051	0.000913545	0.25556017	3.46E-07	1000	0.000345953
67	0.001861111	0.002761515	0.736510826	0.000920505	0.245503609	3.31E-07	1000	0.000330755
68	0.001888889	0.002781552	0.706116793	0.000927184	0.235372264	3.16E-07	1000	0.000315653
69	0.001916667	0.002800741	0.675507671	0.00093358	0.225169224	3.01E-07	1000	0.000300643
70	0.001944444	0.002819078	0.644692782	0.000939693	0.214897594	2.86E-07	1000	0.000285723

V(x,y)

71	0.001972222	0.002836556	0.613681513	0.000945519	0.204560504	2.71E-07	1000	0.000270888
72	0.002	0.00285317	0.582483312	0.000951057	0.194161104	2.56E-07	1000	0.000256134
73	0.002027778	0.002868914	0.55110768	0.000956305	0.18370256	2.41E-07	1000	0.00024146
74	0.002055556	0.002883785	0.519564175	0.000961262	0.173188058	2.27E-07	1000	0.000226859
75	0.002083333	0.002897777	0.487862406	0.000965926	0.162620802	2.12E-07	1000	0.00021233
76	0.002111111	0.002910887	0.45601203	0.000970296	0.15200401	1.98E-07	1000	0.000197867
77	0.002138889	0.00292311	0.424022748	0.00097437	0.141340916	1.83E-07	1000	0.000183467
78	0.002166667	0.002934443	0.391904304	0.000978148	0.130634768	1.69E-07	1000	0.000169126
79	0.002194444	0.002944882	0.359666483	0.000981627	0.119888828	1.55E-07	1000	0.000154839
80	0.002222222	0.002954423	0.327319104	0.000984808	0.109106368	1.41E-07	1000	0.000140602
81	0.00225	0.002963065	0.29487202	0.000987688	0.098290673	1.26E-07	1000	0.00012641
82	0.002277778	0.002970804	0.262335115	0.000990268	0.087445038	1.12E-07	1000	0.00011226
83	0.002305556	0.002977638	0.2297183	0.000992546	0.076572767	9.81E-08	1000	9.8147E-005
84	0.002333333	0.002983566	0.197031511	0.000994522	0.06567717	8.41E-08	1000	8.4066E-005
85	0.002361111	0.002988584	0.164284705	0.000996195	0.054761568	7.00E-08	1000	7.0012E-005
86	0.002388889	0.002992692	0.131487855	0.000997564	0.043829285	5.60E-08	1000	5.5982E-005
87	0.002416667	0.002995889	0.098650953	0.00099863	0.032883651	4.20E-08	1000	4.1970E-005
88	0.002444444	0.002998172	0.065784001	0.000999391	0.021928	2.80E-08	1000	2.7972E-005
89	0.002472222	0.002999543	0.032897011	0.000999848	0.01096567	1.40E-08	1000	1.3984E-005
90	0.0025	0.003	1.1542E-016	0.001	3.8473E-017	4.91E-23	1000	4.9058E-020
91	0.002527778	0.002999543	0.032897011	0.000999848	-0.01096567	-1.40E-08	1000	-1.3984E-005
92	0.002555556	0.002998172	0.065784001	0.000999391	-0.021928	-2.80E-08	1000	-2.7972E-005
93	0.002583333	0.002995889	0.098650953	0.00099863	0.032883651	-4.20E-08	1000	-4.1970E-005
94	0.002611111	0.002992692	0.131487855	0.000997564	0.043829285	-5.60E-08	1000	-5.5982E-005
95	0.002638889	0.002988584	0.164284705	0.000996195	0.054761568	-7.00E-08	1000	-7.0012E-005
96	0.002666667	0.002983566	0.197031511	0.000994522	-0.06567717	-8.41E-08	1000	-8.4066E-005
97	0.002694444	0.002977638	-0.2297183	0.000992546	0.076572767	-9.81E-08	1000	-9.8147E-005
98	0.002722222	0.002970804	0.262335115	0.000990268	0.087445038	-1.12E-07	1000	-0.00011226
99	0.00275	0.002963065	-0.29487202	0.000987688	0.098290673	-1.26E-07	1000	-0.00012641
100	0.002777778	0.002954423	0.327319104	0.000984808	0.109106368	-1.41E-07	1000	0.000140602
101	0.002805556	0.002944882	0.359666483	0.000981627	0.119888828	-1.55E-07	1000	0.000154839
102	0.002833333	0.002934443	0.391904304	0.000978148	0.130634768	-1.69E-07	1000	-0.000169126
103	0.002861111	0.00292311	0.424022748	0.00097437	0.141340916	-1.83E-07	1000	0.000183467
104	0.002888889	0.002910887	-0.45601203	0.000970296	-0.15200401	-1.98E-07	1000	0.000197867
105	0.002916667	0.002897777	0.487862406	0.000965926	0.162620802	-2.12E-07	1000	-0.00021233
106	0.002944444	0.002883785	0.519564175	0.000961262	0.173188058	-2.27E-07	1000	0.000226859
107	0.002972222	0.002868914	-0.55110768	0.000956305	-0.18370256	-2.41E-07	1000	-0.00024146
108	0.003	0.00285317	0.582483312	0.000951057	0.194161104	-2.56E-07	1000	0.000256134
109	0.003027778	0.002836556	0.613681513	0.000945519	0.204560504	-2.71E-07	1000	0.000270888
110	0.003055556	0.002819078	0.644692782	0.000939693	0.214897594	-2.86E-07	1000	0.000285723
111	0.003083333	0.002800741	0.675507671	0.000933358	0.225169224	-3.01E-07	1000	0.000300643
112	0.003111111	0.002781552	0.706116793	0.000927184	0.235372264	-3.16E-07	1000	0.000315653
113	0.003138889	0.002761515	0.736510826	0.000920505	0.245503609	-3.31E-07	1000	0.000330755
114	0.003166667	0.002740636	-0.76668051	0.000913545	-0.25556017	-3.46E-07	1000	0.000345953
115	0.003194444	0.002718923	0.796616656	0.000906308	0.265538885	-3.61E-07	1000	0.000361248
116	0.003222222	0.002696382	0.826310145	0.000898794	0.275436715	-3.77E-07	1000	0.000376645

V(x,y)

117	0.00325	0.00267302	0.855751931	0.000891007	0.285250644	-3.92E-07	1000	0.000392145
118	0.003277778	0.002648843	0.884933048	0.000882948	0.294977683	-4.08E-07	1000	0.000407751
119	0.003305556	0.002623859	0.913844605	0.00087462	0.304614868	-4.23E-07	1000	0.000423466
120	0.003333333	0.002598076	0.942477796	0.000866025	0.314159265	-4.39E-07	1000	-0.00043929
121	0.003361111	0.002571502	0.970823899	0.000857167	0.323607966	-4.55E-07	1000	0.000455227
122	0.003388889	0.002544144	0.998874281	0.000848048	0.332958094	-4.71E-07	1000	-0.000471276
123	0.003416667	0.002516012	1.026620395	0.000838671	0.342206798	-4.87E-07	1000	-0.00048744
124	0.003444444	0.002487113	-1.05405379	0.000829038	0.351351263	-5.04E-07	1000	0.000503719
125	0.003472222	0.002457456	1.081166111	0.000819152	0.360388704	-5.20E-07	1000	0.000520114
126	0.0035	0.002427051	1.107949098	0.000809017	0.369316366	-5.37E-07	1000	0.000536625
127	0.003527778	0.002395907	1.134394593	0.000798636	0.378131531	-5.53E-07	1000	0.000553253
128	0.003555556	0.002364032	1.160494541	0.000788011	0.386831514	-5.70E-07	1000	0.000569996
129	0.003583333	0.002331438	-1.18624099	0.000777146	0.395413663	-5.87E-07	1000	0.000586854
130	0.003611111	0.002298133	1.211626099	0.000766044	0.403875366	-6.04E-07	1000	0.000603825
131	0.003638889	0.002264129	1.236642135	0.00075471	0.412214045	-6.21E-07	1000	0.000620909
132	0.003666667	0.002229434	1.261281478	0.000743145	0.420427159	-6.38E-07	1000	0.000638103
133	0.003694444	0.002194061	1.285536623	0.000731354	0.428512208	-6.55E-07	1000	0.000655405
134	0.003722222	0.002158019	-1.30940018	0.00071934	0.436466727	-6.73E-07	1000	0.000672812
135	0.00375	0.00212132	1.332864881	0.000707107	0.444288294	-6.90E-07	1000	0.000690321
136	0.003777778	0.002083975	1.355923579	0.000694658	0.451974526	-7.08E-07	1000	0.000707927
137	0.003805556	0.002045995	-1.37856925	0.000681998	0.459523083	-7.26E-07	1000	-0.000725627
138	0.003833333	0.002007392	1.400794995	0.000669131	0.466931665	-7.43E-07	1000	0.000743415
139	0.003861111	0.001968177	1.422594044	0.000656059	0.474198015	-7.61E-07	1000	0.000761287
140	0.003888889	0.001928363	1.443959757	0.000642788	-0.481319919	-7.79E-07	1000	-0.000779236
141	0.003916667	0.001887961	-1.464885626	0.00062932	0.488295209	-7.97E-07	1000	0.000797256
142	0.003944444	0.001846984	1.485365277	0.000615661	0.495121759	-8.15E-07	1000	-0.000815339
143	0.003972222	0.001805445	1.505392471	0.000601815	-0.50179749	-8.33E-07	1000	0.000833478
144	0.004	0.001763356	1.524961108	0.000587785	0.508320369	-8.52E-07	1000	-0.000851665
145	0.004027778	0.001720729	1.544065227	0.000573576	0.514688409	-8.70E-07	1000	-0.00086989
146	0.004055556	0.001677579	1.562699008	0.000559193	0.520899669	-8.88E-07	1000	0.000888145
147	0.004083333	0.001633917	-1.580856777	0.000544639	-0.526952259	-9.06E-07	1000	0.000906418
148	0.004111111	0.001589758	1.598533001	0.000529919	0.532844334	-9.25E-07	1000	-0.000924699
149	0.004138889	0.001545114	1.615722297	0.000515038	-0.538574099	-9.43E-07	1000	0.000942976
150	0.004166667	0.0015	1.632419428	0.0005	0.544139809	-9.61E-07	1000	0.000961238
151	0.004194444	0.001454429	-1.648619308	0.00048481	0.549539769	-9.79E-07	1000	0.000979471
152	0.004222222	0.001408415	1.664317003	0.000469472	0.554772334	-9.98E-07	1000	0.000997661
153	0.00425	0.001361971	-1.67950773	0.00045399	-0.55983591	-1.02E-06	1000	0.001015796
154	0.004277778	0.001315113	1.694186864	0.000438371	0.564728955	-1.03E-06	1000	0.001033859
155	0.004305556	0.001267855	1.708349931	0.000422618	0.569449977	-1.05E-06	1000	0.001051835
156	0.004333333	0.00122021	1.721992619	0.000406737	-0.57399754	-1.07E-06	1000	0.001069709
157	0.004361111	0.001172193	1.735110771	0.000390731	-0.578370257	-1.09E-06	1000	0.001087463
158	0.004388889	0.00112382	1.747700392	0.000374607	0.582566797	-1.11E-06	1000	0.001105081
159	0.004416667	0.001075104	1.759757646	0.000358368	0.586585882	-1.12E-06	1000	-0.001122544
160	0.004444444	0.00102606	-1.77127886	0.00034202	0.590426287	-1.14E-06	1000	0.001139835
161	0.004472222	0.000976704	1.782260527	0.000325568	0.594086842	-1.16E-06	1000	0.001156934
162	0.0045	0.000927051	1.792699299	0.000309017	0.597566433	-1.17E-06	1000	0.001173822

V(x,y)

163	0.004527778	0.000877115	1.802591998	0.000292372	0.600863999	-1.19E-06	1000	-0.00119048
164	0.004555556	0.000826912	1.811935609	0.000275637	0.603978536	-1.21E-06	1000	0.001206887
165	0.004583333	0.000776457	1.820727288	0.000258819	-0.606909096	-1.22E-06	1000	0.001223023
166	0.004611111	0.000725766	1.828964355	0.000241922	0.609654785	-1.24E-06	1000	0.001238868
167	0.004638889	0.000674853	1.836644302	0.000224951	0.612214767	-1.25E-06	1000	0.001254399
168	0.004666667	0.000623735	-1.84376479	0.000207912	0.614588263	-1.27E-06	1000	-0.001269597
169	0.004694444	0.000572427	1.850323649	0.000190809	-0.61677455	-1.28E-06	1000	0.001284439
170	0.004722222	0.000520945	1.856318881	0.000173648	-0.61877296	-1.30E-06	1000	0.001298905
171	0.00475	0.000469303	1.861748661	0.000156434	-0.620582887	-1.31E-06	1000	0.001312973
172	0.004777778	0.000417519	1.866611334	0.000139173	-0.622203778	-1.33E-06	1000	0.001326622
173	0.004805556	0.000365608	-1.870905419	0.000121869	-0.62363514	-1.34E-06	1000	-0.00133983
174	0.004833333	0.000313585	1.874629608	0.000104528	0.624876536	-1.35E-06	1000	0.001352577
175	0.004861111	0.000261467	-1.877782767	8.7156E-005	-0.625927589	-1.36E-06	1000	0.001364841
176	0.004888889	0.000209269	1.880363935	6.9756E-005	0.626787978	-1.38E-06	1000	0.001376602
177	0.004916667	0.000157008	-1.882372326	0.000052336	-0.627457442	-1.39E-06	1000	-0.00138784
178	0.004944444	0.000104698	1.883807328	3.4899E-005	-0.627935776	-1.40E-06	1000	0.001398536
179	0.004972222	5.2357E-005	1.884668504	1.7452E-005	0.628222835	-1.41E-06	1000	-0.00140867
180	0.005	3.6739E-019	1.884955592	1.2246E-019	0.628318531	-1.42E-06	1000	0.001418223
181	0.005027778	-5.2357E-005	1.884668504	-1.7452E-005	0.628222835	-1.43E-06	1000	0.001427178
182	0.005055556	0.000104698	1.883807328	-3.4899E-005	-0.627935776	-1.44E-06	1000	0.001435517
183	0.005083333	0.000157008	-1.882372326	-5.2336E-005	-0.627457442	-1.44E-06	1000	-0.001443224
184	0.005111111	0.000209269	1.880363935	-6.9756E-005	0.626787978	-1.45E-06	1000	0.001450282
185	0.005138889	0.000261467	-1.877782767	-8.7156E-005	-0.625927589	-1.46E-06	1000	0.001456677
186	0.005166667	0.000313585	1.874629608	0.000104528	0.624876536	-1.46E-06	1000	0.001462394
187	0.005194444	-0.000365608	-1.870905419	0.000121869	-0.62363514	-1.47E-06	1000	0.001467421
188	0.005222222	0.000417519	1.866611334	0.000139173	-0.622203778	-1.47E-06	1000	0.001471744
189	0.00525	0.000469303	1.861748661	0.000156434	-0.620582887	-1.48E-06	1000	0.001475352
190	0.005277778	0.000520945	1.856318881	0.000173648	-0.61877296	-1.48E-06	1000	0.001478235
191	0.005305556	-0.000572427	1.850323649	-0.000190809	-0.61677455	-1.48E-06	1000	0.001480383
192	0.005333333	0.000623735	-1.84376479	0.000207912	0.614588263	-1.48E-06	1000	0.001481788
193	0.005361111	0.000674853	1.836644302	0.000224951	0.612214767	-1.48E-06	1000	0.001482442
194	0.005388889	0.000725766	1.828964355	0.000241922	0.609654785	-1.48E-06	1000	0.001482339
195	0.005416667	0.000776457	1.820727288	-0.000258819	-0.606909096	-1.48E-06	1000	0.001481473
196	0.005444444	0.000826912	1.811935609	0.000275637	0.603978536	-1.48E-06	1000	0.001479839
197	0.005472222	0.000877115	1.802591998	0.000292372	0.600863999	-1.48E-06	1000	0.001477434
198	0.0055	-0.000927051	1.792699299	-0.000309017	0.597566433	-1.47E-06	1000	0.001474256
199	0.005527778	0.000976704	1.782260527	0.000325568	0.594086842	-1.47E-06	1000	0.001470303
200	0.005555556	-0.00102606	-1.77127886	-0.00034202	0.590426287	-1.47E-06	1000	0.001465573
201	0.005583333	0.001075104	1.759757646	0.000358368	0.586585882	-1.46E-06	1000	0.001460068
202	0.005611111	-0.00112382	1.747700392	0.000374607	0.582566797	-1.45E-06	1000	0.001453789
203	0.005638889	0.001172193	1.735110771	0.000390731	-0.578370257	-1.45E-06	1000	0.001446738
204	0.005666667	-0.00122021	1.721992619	0.000406737	-0.57399754	-1.44E-06	1000	0.001438917
205	0.005694444	0.001267855	1.708349931	0.000422618	0.569449977	-1.43E-06	1000	-0.001430332
206	0.005722222	0.001315113	1.694186864	0.000438371	0.564728955	-1.42E-06	1000	0.001420986
207	0.00575	0.001361971	-1.67950773	-0.00045399	-0.55983591	-1.41E-06	1000	0.001410886
208	0.005777778	0.001408415	1.664317003	0.000469472	0.554772334	-1.40E-06	1000	0.001400039

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209	0.005805556	0.001454429	-1.648619308	-0.00048481	0.549539769	-1.39E-06	1000	0.001388451
210	0.005833333	-0.0015	1.632419428	-0.0005	0.544139809	-1.38E-06	1000	0.001376132
211	0.005861111	0.001545114	1.615722297	0.000515038	-0.538574099	-1.36E-06	1000	-0.00136309
212	0.005888889	0.001589758	1.598533001	0.000529919	0.532844334	-1.35E-06	1000	0.001349337
213	0.005916667	0.001633917	-1.580856777	-0.000544639	-0.526952259	-1.33E-06	1000	0.001334883
214	0.005944444	0.001677579	1.562699008	0.000559193	0.520899669	-1.32E-06	1000	-0.00131974
215	0.005972222	0.001720729	1.544065227	0.000573576	0.514688409	-1.30E-06	1000	0.001303922
216	0.006	0.001763356	1.524961108	0.000587785	0.508320369	-1.29E-06	1000	0.001287443
217	0.006027778	0.001805445	1.505392471	-0.000601815	-0.50179749	-1.27E-06	1000	0.001270317
218	0.006055556	0.001846984	1.485365277	0.000615661	0.495121759	-1.25E-06	1000	0.001252561
219	0.006083333	0.001887961	-1.464885626	-0.00062932	0.488295209	-1.23E-06	1000	0.001234192
220	0.006111111	0.001928363	1.443959757	0.000642788	-0.481319919	-1.22E-06	1000	0.001215227
221	0.006138889	0.001968177	1.422594044	-0.000656059	0.474198015	-1.20E-06	1000	0.001195685
222	0.006166667	0.002007392	1.400794995	0.000669131	0.466931665	-1.18E-06	1000	0.001175587
223	0.006194444	0.002045995	-1.37856925	0.000681998	0.459523083	-1.15E-06	1000	0.001154954
224	0.006222222	0.002083975	1.355923579	0.000694658	0.451974526	-1.13E-06	1000	0.001133805
225	0.00625	-0.00212132	1.332864881	0.000707107	0.444288294	-1.11E-06	1000	0.001112166
226	0.006277778	0.002158019	-1.30940018	-0.00071934	0.436466727	-1.09E-06	1000	0.001090058
227	0.006305556	0.002194061	1.285536623	0.000731354	0.428512208	-1.07E-06	1000	0.001067507
228	0.006333333	0.002229434	1.261281478	0.000743145	0.420427159	-1.04E-06	1000	0.001044536
229	0.006361111	0.002264129	1.236642135	-0.00075471	0.412214045	-1.02E-06	1000	-0.001021173
230	0.006388889	0.002298133	1.211626099	0.000766044	0.403875366	-9.97E-07	1000	0.000997443
231	0.006416667	0.002331438	-1.18624099	-0.000777146	0.395413663	-9.73E-07	1000	0.000973372
232	0.006444444	0.002364032	1.160494541	0.000788011	0.386831514	-9.49E-07	1000	-0.000948989
233	0.006472222	0.002395907	1.134394593	0.000798636	0.378131531	-9.24E-07	1000	-0.00092432
234	0.0065	-0.002427051	1.107949098	-0.000809017	0.369316366	-8.99E-07	1000	0.000899394
235	0.006527778	0.002457456	1.081166111	-0.000819152	0.360388704	-8.74E-07	1000	0.000874237
236	0.006555556	0.002487113	-1.05405379	0.000829038	0.351351263	-8.49E-07	1000	0.000848878
237	0.006583333	0.002516012	1.026620395	0.000838671	0.342206798	-8.23E-07	1000	0.000823344
238	0.006611111	0.002544144	0.998874281	0.000848048	0.332958094	-7.98E-07	1000	0.000797663
239	0.006638889	0.002571502	0.970823899	0.000857167	0.323607966	-7.72E-07	1000	-0.00077186
240	0.006666667	0.002598076	0.942477796	0.000866025	0.314159265	-7.46E-07	1000	0.000745962
241	0.006694444	0.002623859	0.913844605	-0.00087462	0.304614868	-7.20E-07	1000	0.000719995
242	0.006722222	0.002648843	0.884933048	0.000882948	0.294977683	-6.94E-07	1000	0.000693983
243	0.00675	-0.00267302	0.855751931	0.000891007	0.285250644	-6.68E-07	1000	0.000667948
244	0.006777778	0.002696382	0.826310145	-0.000898794	0.275436715	-6.42E-07	1000	0.000641915
245	0.006805556	0.002718923	0.796616656	0.000906308	0.265538885	-6.16E-07	1000	0.000615903
246	0.006833333	0.002740636	-0.76668051	0.000913545	-0.25556017	-5.90E-07	1000	0.000589932
247	0.006861111	0.002761515	0.736510826	0.000920505	0.245503609	-5.64E-07	1000	-0.00056402
248	0.006888889	0.002781552	0.706116793	0.000927184	0.235372264	-5.38E-07	1000	0.000538184
249	0.006916667	0.002800741	0.675507671	-0.000933358	0.225169224	-5.12E-07	1000	0.000512439
250	0.006944444	0.002819078	0.644692782	0.000939693	0.214897594	-4.87E-07	1000	-0.000486797
251	0.006972222	0.002836556	0.613681513	0.000945519	0.204560504	-4.61E-07	1000	0.000461271
252	0.007	-0.00285317	0.582483312	0.000951057	0.194161104	-4.36E-07	1000	0.000435869
253	0.007027778	0.002868914	-0.55110768	0.000956305	-0.18370256	-4.11E-07	1000	0.000410599
254	0.007055556	0.002883785	0.519564175	0.000961262	0.173188058	-3.85E-07	1000	0.000385467

V(x,y)

255	0.007083333	0.002897777	0.487862406	0.000965926	0.162620802	-3.60E-07	1000	0.000360477
256	0.007111111	0.002910887	-0.45601203	0.000970296	-0.15200401	-3.36E-07	1000	-0.000335631
257	0.007138889	-0.00292311	0.424022748	-0.00097437	0.141340916	-3.11E-07	1000	0.000310928
258	0.007166667	0.002934443	0.391904304	0.000978148	0.130634768	-2.86E-07	1000	0.000286368
259	0.007194444	0.002944882	0.359666483	0.000981627	0.119888828	-2.62E-07	1000	0.000261945
260	0.007222222	0.002954423	0.327319104	0.000984808	0.109106368	-2.38E-07	1000	0.000237657
261	0.00725	-0.002963065	-0.29487202	0.000987688	0.098290673	-2.13E-07	1000	0.000213495
262	0.007277778	0.002970804	0.262335115	0.000990268	0.087445038	-1.89E-07	1000	0.000189451
263	0.007305556	0.002977638	-0.2297183	0.000992546	0.076572767	-1.66E-07	1000	0.000165517
264	0.007333333	0.002983566	0.197031511	0.000994522	-0.06567717	-1.42E-07	1000	0.000141681
265	0.007361111	0.002988584	0.164284705	0.000996195	0.054761568	-1.18E-07	1000	0.000117931
266	0.007388889	0.002992692	0.131487855	0.000997564	0.043829285	-9.43E-08	1000	-9.4254E-005
267	0.007416667	0.002995889	0.098650953	-0.00099863	0.032883651	-7.06E-08	1000	-7.0637E-005
268	0.007444444	0.002998172	0.065784001	0.000999391	-0.021928	-4.71E-08	1000	-4.7066E-005
269	0.007472222	0.002999543	0.032897011	0.000999848	-0.01096567	-2.35E-08	1000	-2.3525E-005
270	0.0075	-0.003	-3.4626E-016	-0.001	-1.1542E-016	-2.48E-22	1000	-2.4758E-019
271	0.007527778	0.002999543	0.032897011	0.000999848	0.01096567	2.35E-08	1000	2.3525E-005
272	0.007555556	0.002998172	0.065784001	0.000999391	0.021928	4.71E-08	1000	4.7066E-005
273	0.007583333	0.002995889	0.098650953	-0.00099863	0.032883651	7.06E-08	1000	7.0637E-005
274	0.007611111	0.002992692	0.131487855	0.000997564	0.043829285	9.43E-08	1000	9.4254E-005
275	0.007638889	0.002988584	0.164284705	0.000996195	0.054761568	1.18E-07	1000	0.000117931
276	0.007666667	0.002983566	0.197031511	0.000994522	0.06567717	1.42E-07	1000	0.000141681
277	0.007694444	0.002977638	0.2297183	0.000992546	0.076572767	1.66E-07	1000	0.000165517
278	0.007722222	0.002970804	0.262335115	0.000990268	0.087445038	1.89E-07	1000	0.000189451
279	0.00775	-0.002963065	0.29487202	0.000987688	0.098290673	2.13E-07	1000	0.000213495
280	0.007777778	0.002954423	0.327319104	0.000984808	0.109106368	2.38E-07	1000	0.000237657
281	0.007805556	0.002944882	0.359666483	0.000981627	0.119888828	2.62E-07	1000	0.000261945
282	0.007833333	0.002934443	0.391904304	0.000978148	0.130634768	2.86E-07	1000	0.000286368
283	0.007861111	-0.00292311	0.424022748	-0.00097437	0.141340916	3.11E-07	1000	0.000310928
284	0.007888889	0.002910887	0.45601203	0.000970296	0.15200401	3.36E-07	1000	0.000335631
285	0.007916667	0.002897777	0.487862406	0.000965926	0.162620802	3.60E-07	1000	0.000360477
286	0.007944444	0.002883785	0.519564175	0.000961262	0.173188058	3.85E-07	1000	0.000385467
287	0.007972222	0.002868914	0.55110768	0.000956305	0.18370256	4.11E-07	1000	0.000410599
288	0.008	-0.00285317	0.582483312	0.000951057	0.194161104	4.36E-07	1000	0.000435869
289	0.008027778	0.002836556	0.613681513	0.000945519	0.204560504	4.61E-07	1000	0.000461271
290	0.008055556	0.002819078	0.644692782	0.000939693	0.214897594	4.87E-07	1000	0.000486797
291	0.008083333	0.002800741	0.675507671	-0.00093358	0.225169224	5.12E-07	1000	0.000512439
292	0.008111111	0.002781552	0.706116793	0.000927184	0.235372264	5.38E-07	1000	0.000538184
293	0.008138889	0.002761515	0.736510826	0.000920505	0.245503609	5.64E-07	1000	0.00056402
294	0.008166667	0.002740636	0.76668051	0.000913545	0.25556017	5.90E-07	1000	0.000589932
295	0.008194444	0.002718923	0.796616656	0.000906308	0.265538885	6.16E-07	1000	0.000615903
296	0.008222222	0.002696382	0.826310145	-0.000898794	0.275436715	6.42E-07	1000	0.000641915
297	0.00825	-0.00267302	0.855751931	0.000891007	0.285250644	6.68E-07	1000	0.000667948
298	0.008277778	0.002648843	0.884933048	0.000882948	0.294977683	6.94E-07	1000	0.000693983
299	0.008305556	0.002623859	0.913844605	-0.00087462	0.304614868	7.20E-07	1000	0.000719995
300	0.008333333	0.002598076	0.942477796	0.000866025	0.314159265	7.46E-07	1000	0.000745962

V(x,y)

301	0.008361111	0.002571502	0.970823899	0.000857167	0.323607966	7.72E-07	1000	0.00077186
302	0.008388889	0.002544144	0.998874281	0.000848048	0.332958094	7.98E-07	1000	0.000797663
303	0.008416667	0.002516012	1.026620395	0.000838671	0.342206798	8.23E-07	1000	0.000823344
304	0.008444444	0.002487113	1.05405379	0.000829038	0.351351263	8.49E-07	1000	0.000848878
305	0.008472222	0.002457456	1.081166111	-0.000819152	0.360388704	8.74E-07	1000	0.000874237
306	0.0085	-0.002427051	1.107949098	-0.000809017	0.369316366	8.99E-07	1000	0.000899394
307	0.008527778	0.002395907	1.134394593	0.000798636	0.378131531	9.24E-07	1000	0.00092432
308	0.008555556	0.002364032	1.160494541	0.000788011	0.386831514	9.49E-07	1000	0.000948989
309	0.008583333	0.002331438	1.18624099	-0.000777146	0.395413663	9.73E-07	1000	0.000973372
310	0.008611111	0.002298133	1.211626099	0.000766044	0.403875366	9.97E-07	1000	0.000997443
311	0.008638889	0.002264129	1.236642135	-0.00075471	0.412214045	1.02E-06	1000	0.001021173
312	0.008666667	0.002229434	1.261281478	0.000743145	0.420427159	1.04E-06	1000	0.001044536
313	0.008694444	0.002194061	1.285536623	0.000731354	0.428512208	1.07E-06	1000	0.001067507
314	0.008722222	0.002158019	1.30940018	-0.00071934	0.436466727	1.09E-06	1000	0.001090058
315	0.00875	-0.00212132	1.332864881	0.000707107	0.444288294	1.11E-06	1000	0.001112166
316	0.008777778	0.002083975	1.355923579	0.000694658	0.451974526	1.13E-06	1000	0.001133805
317	0.008805556	0.002045995	1.37856925	0.000681998	0.459523083	1.15E-06	1000	0.001154954
318	0.008833333	0.002007392	1.400794995	0.000669131	0.466931665	1.18E-06	1000	0.001175587
319	0.008861111	0.001968177	1.422594044	-0.000656059	0.474198015	1.20E-06	1000	0.001195685
320	0.008888889	0.001928363	1.443959757	0.000642788	0.481319919	1.22E-06	1000	0.001215227
321	0.008916667	0.001887961	1.464885626	-0.00062932	0.488295209	1.23E-06	1000	0.001234192
322	0.008944444	0.001846984	1.485365277	0.000615661	0.495121759	1.25E-06	1000	0.001252561
323	0.008972222	0.001805445	1.505392471	-0.000601815	0.50179749	1.27E-06	1000	0.001270317
324	0.009	0.001763356	1.524961108	0.000587785	0.508320369	1.29E-06	1000	0.001287443
325	0.009027778	0.001720729	1.544065227	0.000573576	0.514688409	1.30E-06	1000	0.001303922
326	0.009055556	0.001677579	1.562699008	0.000559193	0.520899669	1.32E-06	1000	0.00131974
327	0.009083333	0.001633917	1.580856777	-0.000544639	0.526952259	1.33E-06	1000	0.001334883
328	0.009111111	0.001589758	1.598533001	0.000529919	0.532844334	1.35E-06	1000	0.001349337
329	0.009138889	0.001545114	1.615722297	0.000515038	0.538574099	1.36E-06	1000	0.00136309
330	0.009166667	-0.0015	1.632419428	-0.0005	0.544139809	1.38E-06	1000	0.001376132
331	0.009194444	0.001454429	1.648619308	-0.00048481	0.549539769	1.39E-06	1000	0.001388451
332	0.009222222	0.001408415	1.664317003	0.000469472	0.554772334	1.40E-06	1000	0.001400039
333	0.00925	0.001361971	1.67950773	-0.00045399	0.55983591	1.41E-06	1000	0.001410886
334	0.009277778	0.001315113	1.694186864	0.000438371	0.564728955	1.42E-06	1000	0.001420986
335	0.009305556	0.001267855	1.708349931	0.000422618	0.569449977	1.43E-06	1000	0.001430332
336	0.009333333	-0.00122021	1.721992619	0.000406737	0.57399754	1.44E-06	1000	0.001438917
337	0.009361111	0.001172193	1.735110771	0.000390731	0.578370257	1.45E-06	1000	0.001446738
338	0.009388889	-0.00112382	1.747700392	0.000374607	0.582566797	1.45E-06	1000	0.001453789
339	0.009416667	0.001075104	1.759757646	0.000358368	0.586585882	1.46E-06	1000	0.001460068
340	0.009444444	-0.00102606	1.77127886	-0.00034202	0.590426287	1.47E-06	1000	0.001465573
341	0.009472222	0.000976704	1.782260527	0.000325568	0.594086842	1.47E-06	1000	0.001470303
342	0.0095	-0.000927051	1.792699299	-0.000309017	0.597566433	1.47E-06	1000	0.001474256
343	0.009527778	0.000877115	1.802591998	0.000292372	0.600863999	1.48E-06	1000	0.001477434
344	0.009555556	0.000826912	1.811935609	0.000275637	0.603978536	1.48E-06	1000	0.001479839
345	0.009583333	0.000776457	1.820727288	-0.000258819	0.606909096	1.48E-06	1000	0.001481473
346	0.009611111	0.000725766	1.828964355	0.000241922	0.609654785	1.48E-06	1000	0.001482339



V(x,y)

347	0.009638889	0.000674853	1.836644302	0.000224951	0.612214767	1.48E-06	1000	0.001482442
348	0.009666667	0.000623735	1.84376479	0.000207912	0.614588263	1.48E-06	1000	0.001481788
349	0.009694444	-0.000572427	1.850323649	-0.000190809	0.61677455	1.48E-06	1000	0.001480383
350	0.009722222	0.000520945	1.856318881	0.000173648	0.61877296	1.48E-06	1000	0.001478235
351	0.00975	0.000469303	1.861748661	0.000156434	0.620582887	1.48E-06	1000	0.001475352
352	0.009777778	0.000417519	1.866611334	0.000139173	0.622203778	1.47E-06	1000	0.001471744
353	0.009805556	-0.000365608	1.870905419	0.000121869	0.62363514	1.47E-06	1000	0.001467421
354	0.009833333	0.000313585	1.874629608	0.000104528	0.624876536	1.46E-06	1000	0.001462394
355	0.009861111	0.000261467	1.877782767	-8.7156E-005	0.625927589	1.46E-06	1000	0.001456677
356	0.009888889	0.000209269	1.880363935	-6.9756E-005	0.626787978	1.45E-06	1000	0.001450282
357	0.009916667	0.000157008	1.882372326	-5.2336E-005	0.627457442	1.44E-06	1000	0.001443224
358	0.009944444	0.000104698	1.883807328	-3.4899E-005	0.627935776	1.44E-06	1000	0.001435517
359	0.009972222	-5.2357E-005	1.884668504	-1.7452E-005	0.628222835	1.43E-06	1000	0.001427178