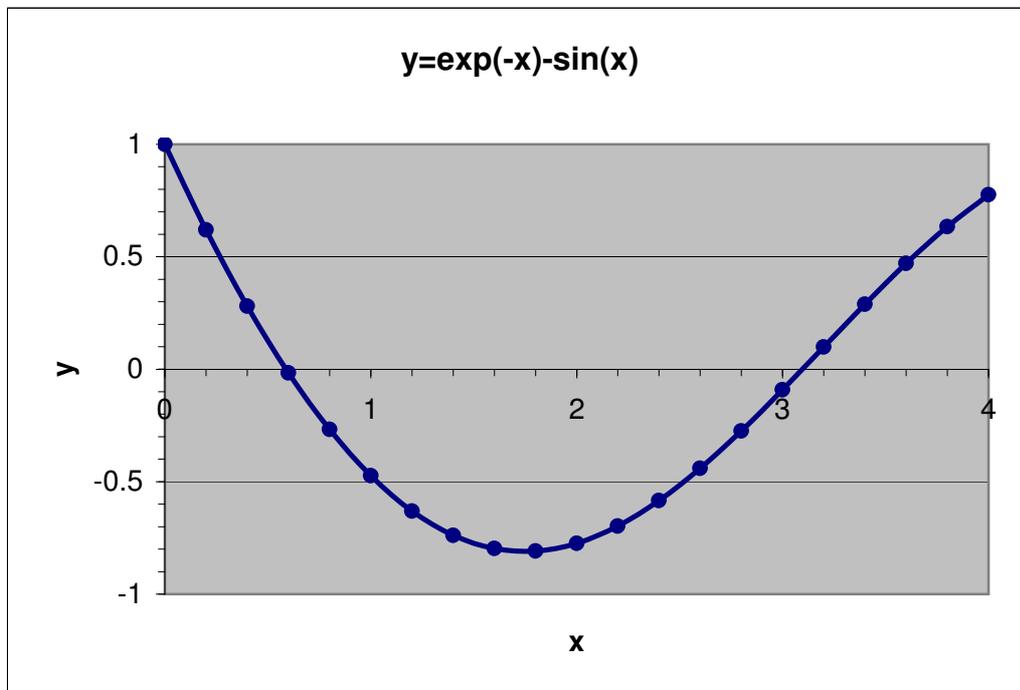


## Solution for problem 1

x	y
0	1
0.2	0.620061
0.4	0.280902
0.6	-0.015831
0.8	-0.268027
1	-0.473592
1.2	-0.630845
1.4	-0.738853
1.6	-0.797677
1.8	-0.808549
2	-0.773962
2.2	-0.697693
2.4	-0.584745
2.6	-0.441228
2.8	-0.274178
3	-0.091333
3.2	0.099136
3.4	0.288914
3.6	0.469844
3.8	0.634229
4	0.775118

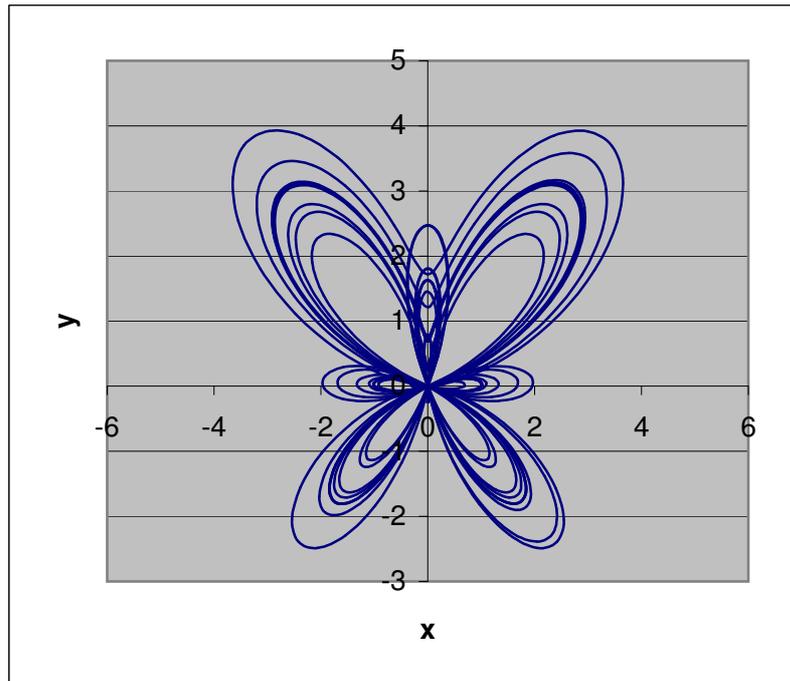


## Solution for problem2

Many pages of data will be generated.

Only the first page of data with the embedded curve is required to be printed out.

t	x(t)	y(t)
0	0	0.718282
0.1	0.086118	0.858304
0.2	0.252552	1.24588
0.3	0.55405	1.791093
0.4	1.000943	2.367452
0.5	1.552079	2.841061
0.6	2.121607	3.101144
0.7	2.598194	3.084684
0.8	2.872093	2.789419
0.9	2.863403	2.272257
1	2.544447	1.633771
1.1	1.950516	0.99275
1.2	1.175958	0.457189
1.3	0.356173	0.098879
1.4	-0.360563	-0.062189
1.5	-0.84495	-0.059919
1.6	-1.014756	0.029643
1.7	-0.852574	0.110773
1.8	-0.409033	0.095429
1.9	0.209272	-0.071495
2	0.864249	-0.39553
2.1	1.417403	-0.828965
2.2	1.760213	-1.281251
2.3	1.836712	-1.641074
2.4	1.653146	-1.804716
2.5	1.272699	-1.703696
2.6	0.79696	-1.324742
2.7	0.338923	-0.716951
2.8	-0.005665	0.015933
2.9	-0.181505	0.736612
3	-0.185863	1.303875
3.1	-0.066748	1.603887
3.2	0.092139	1.575737
3.3	0.19572	1.225196
3.4	0.164777	0.623408
3.5	-0.040892	-0.109167
3.6	-0.409451	-0.829744
3.7	-0.877599	-1.404758
3.8	-1.344834	-1.738509
3.9	-1.698032	-1.792261
4	-1.840329	-1.589476
4.1	-1.717136	-1.206255
4.2	-1.332712	-0.74965
4.3	-0.752937	-0.329391
4.4	-0.093253	-0.030117
4.5	0.505663	0.109042
4.6	0.90892	0.102585
4.7	1.017884	0.012611



### Solution for problem 3

Many pages of data will be generated, only the first page are required for submission.

d0=0.25  
1 inch = 0.0254 meter  
1 kilopounds=454.55kg

$A0=\pi*d0^2/4$                       3.1669E-05

True Strain	Load	Eng Strain	Eng Stress	True Stress
0	0	0	0	0
0	0.247	0	34.743003	34.743
0	0.344	0	48.387017	48.38702
0	0.344	0	48.387017	48.38702
0	0.358	0	50.356256	50.35626
0	0.372	0	52.325495	52.3255
0	0.413	0	58.092552	58.09255
0	0.454	0	63.85961	63.85961
0	0.537	0	75.534384	75.53438
0	0.62	0	87.209158	87.20916
0	0.703	0	98.883933	98.88393
0	0.786	0	110.55871	110.5587
0	0.855	0	120.26424	120.2642
0	0.924	0	129.96978	129.9698
0	0.979	0	137.70607	137.7061
0	1.02	0	143.47313	143.4731
0.001	1.062	0.0010005	149.38085	149.5303
0.001	1.103	0.0010005	155.14791	155.3031
0.001	1.145	0.0010005	161.05562	161.2168
0.001	1.172	0.0010005	164.85344	165.0184
0.001	1.214	0.0010005	170.76116	170.932
0.001	1.255	0.0010005	176.52822	176.7048
0.001	1.296	0.0010005	182.29527	182.4777
0.001	1.352	0.0010005	190.17223	190.3625
0.001	1.421	0.0010005	199.87776	200.0777
0.001	1.49	0.0010005	209.5833	209.793
0.001	1.572	0.0010005	221.11741	221.3386
0.001	1.641	0.0010005	230.82295	231.0539
0.001	1.71	0.0010005	240.52849	240.7691
0.001	1.779	0.0010005	250.23402	250.4844
0.001	1.835	0.0010005	258.11098	258.3692
0.001	1.89	0.0010005	265.84727	266.1133
0.001	1.959	0.0010005	275.55281	275.8285
0.001	2.014	0.0010005	283.2891	283.5725
0.001	2.069	0.0010005	291.0254	291.3166
0.001	2.111	0.0010005	296.93312	297.2302
0.001	2.152	0.0010005	302.70018	303.003
0.001	2.194	0.0010005	308.60789	308.9167
0.001	2.235	0.0010005	314.37495	314.6895
0.002	2.263	0.002002	318.31343	318.9507
0.002	2.304	0.002002	324.08049	324.7293
0.002	2.332	0.002002	328.01896	328.6757

