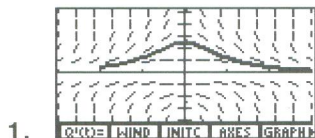


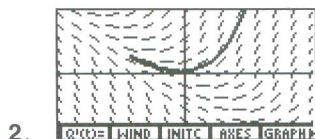
Chapter 2: Recovering a Function From its Derivative: A Numerical Approach



t	Q1
0	.2
-1	.4970236
0	.9859744
1	.4964811
2	.1947781
3	.0952875

t = -2

TR1ST SELCT t Q



t	Q1
0	.6
-1	.1143128
1	.5117012
2	3.30932
3	12.62703
4	39.65373

t = -1.3

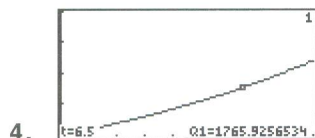
TR1ST SELCT t Q

t	Q1
7.9228	2000.011

t =

TR1ST SELCT t Q

About 7.9 years



About \$1,766.00

t	Q1
875	3.601249

t =

TR1ST SELCT t Q

5. If 10% of the radioactive material has decayed, there should be about 3.6 grams left. By trial and error, you can find the answer is about 875 years.

6. Change Q11 from 4 to 12. Now find the value of t so that Q1 is about 90% of 12. (10.8). The calculated age of the sample is still about 875 years.

7. The calculated age of the sample is still about 875. Conjecture: The calculated age of the sample is independent of the number of grams originally present.