Math 1743 - Math Center Worksheet Section 2.4

Given the sales model $S(t) = 220 - 44.43e^{-0.3912t}$ billion dollars t years after 1990,

- 1. Use the numerical method to approximate S $^{\prime}$ (4) to the hundredths place
- 2. Write an interpretation of your answer.

Math 1743 - Math Center Worksheet Section 2.5

The following table gives the number of personal computers used in kindergarten through 12^{th} grade classrooms from 1981 through 1988:

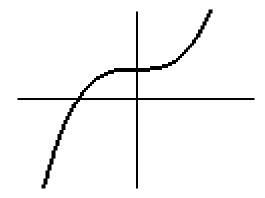
Year	Number of PC's (millions)
1981	0.10
1982	0.21
1983	0.40
1984	0.59
1985	0.87
1986	1.17
1987	1.48
1988	1.76

- 1. Find the best fit model for the data.
- 2. Use the limit definition of the derivative to differentiate your model.
- 3. Find the rate of change of the number of PC's used in classrooms in 1987.

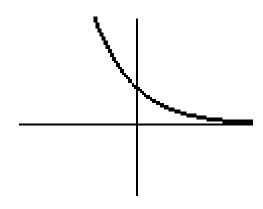
Math 1743 - Math Center Worksheet Section 2.6

Draw slope graphs for each of the given function graphs:

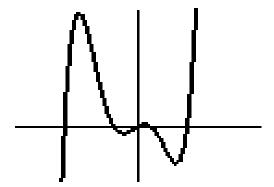
1.



2.



3.



4.

