Name: _____   Grade: _____
Group Members Present:

_____, _____, & _____

1. Of the first three functions studied (linear, exponential, and logarithmic):

   a. A(n) _____ function has no concavity.

   b. A(n) _____ function is normally concave up.

   c. A(n) _____ function can be concave up or concave down.

2. Average salaries for teachers in a large suburban school district are given in the table.

Year	Average Salary	Year	Average Salary
1980	$15,970	1995	$36,685
1985	$23,500	1996	$37,716
1990	$31,367	1997	$38,562
1994	$35,737		

   a. Find a logarithmic model for the data with input aligned as years since 1970.

   b. Calculate the average salary in 1993 and in 2000. Which of the estimates is an extrapolation and which is an interpolation?

Year	Salary	Type of Estimate
1993		
2000		

   c. In what year will the average salary reach $40,000? First give the answer correct to 3 decimal places, then interpret the answer as a year.