Part 1: Using the Library, web resources, and/or other materials, find the logarithmic formula that gives the pH of a substance. State what each variable in your equation represents.

Find the pH of an acidic substance of your choice. Using this pH, show how to find the hydrogen ion concentration, [H+], of the substance using the formula. Discuss the meaning of pH and [H+], the pH scale and why your chosen substance is acidic. Use scientific notation or enough decimal places so that your answer has at least 3 place values. For example, either use 3.44\*10-6 or 0.00000344.

Part 2: Suppose that the number of cars, C, on 1st Avenue in a city over a period of time t, in months, is graphed on a rectangular coordinate system where time is on the horizontal axis. Suppose that the number of cars driven on 1st Avenue can be modeled by an exponential function, C= p \* a***t*** (C=p\*a^t)where p is the number of cars on the road on the first day recorded. If you commuted to work each day along 1st Avenue, would you prefer that the value of "a" be between 0 and 1 or larger than 1? Explain your reasoning. Be sure to reference your sources using APA style.