Example: The half life of Helium is 119 years. What is the annual decay rate? Express the decimal result to four significant digits and the percentage to two significant digits.

Example: A biologist recorded a count of 400 bacteria after 12 minutes and 1200 bacteria after 20 minutes.

a) To the nearest whole number, what was the initial population in the culture?

b) Rounding to six significant digits, write an exponential equation representing the situation.

c) To the nearest minute, how long did it take the population to double?