2. [7 points] The amount, in milligrams (mg), of a certain drug in a patient's bloodstream t minutes after it is administered is given by:

$$V(t) = 120e^{-0.006t}$$

a. [2 points] By what percentage does the amount of the drug in the patient's bloodstream decrease each minute? *Show all work. Give your answer in exact form, or rounded to at least* ***three*** *decimal places.*

_____ %

b. [3 points] How long does it take for the amount of the drug in the patient's bloodstream to decrease to 10 mg? *Show all work. Give your answer rounded to the* ***nearest minute****.*

_____ minutes

c. [2 points] The amount, in mg, of a *different* drug in a patient's bloodstream t minutes after it is administered is given by $G(t)$. Some values of $G(t)$ are given below. Could $G(t)$ be exponential? *Show all work.*

t, in minutes	20	30	50
$G(t)$, in mg	95	76	48.64

(Circle One) COULD BE EXPONENTIAL NOT EXPONENTIAL