A 28-volt battery, providing the electromotive force, is connected in series with a 24-ohm resistor and an inductor of 4 henries. Given the inductance times the rate of change of the current added to the resistance times the current(in ampheres) is equal to the electromotive force. Subsequently, if the switch is closed at time $t = 0$, find the current after 0.5 seconds and if possible what the current will be after a long time.

A corporation is initially worth 5 million dollars and is growing in value by 10% each year, and is additionally gaining 20% of a growing market estimated at $100e^{0.1t}$ million dollars, where t is the number of years the company has existed. Find the value of the company after 5 years.