CQ #3: Money is withdrawn from a savings account at a steady rate of $2000 per month, while the account earns 0.2% monthly interest. Set up a differential equation to model the rate of change in the balance of the account as a function of time.

a) \( \frac{dB}{dt} = 0.002 - 2000 \)

b) \( \frac{dB}{dt} = 0.002 + 2000 \)

c) \( \frac{dB}{dt} = 0.002B + 2000 \)

d) \( \frac{dB}{dt} = 0.002B - 2000 \)

e) \( \frac{dB}{dt} = 0.002t - 2000 \)

There are two abilities to \( B'(t) \):

1. Withdrawal at rate $2000/month so \( B'(t) \) is \( -2000 \).
2. Interest: Its ability to \( B'(t) \) is \( 0.002 \cdot B(t) \).

All these: The answer is (\( \square \)).