Exponential and Logarithmic Functions

Question

At the beginning of every month, Deniece deposits \$200 *into an account that earns an annual interest rate of* 2%*, compounded monthly. Which function correctly models the total amount of money* $a(t)$ *in the account after* t *years?*

(a) $a(t) = 200(.02)^t$

(b) $a(t) = 200(1.02)^{12t}$

(c) $a(t) = 200(1 + \frac{.02}{12})^{12t}$

(d) None of the above

Answer: (d) We are looking for the SUM of the terms of a geometric sequence here.