Basic concepts 002

Problem has been graded.

Determine the values of B1, B2 and B3.

The current through a circuit element is

$$i(t) = A1 \cdot e^{\frac{t}{A2}} \quad \text{for } t \geq 0$$
$$= 0 \quad \text{for } t < 0$$

The total charge that has entered the circuit element can be represented as

$$q(t) = B1 + B2 \cdot e^{\frac{t}{B3}} \quad \text{for } t \geq 0$$
$$= 0 \quad \text{for } t < 0$$

Given Variables:

A1 : 4 A

A2 : -3 s

Calculate the following:

B1 (C) :

B2 (C) :

B3 (s) :