Basic analysis 011
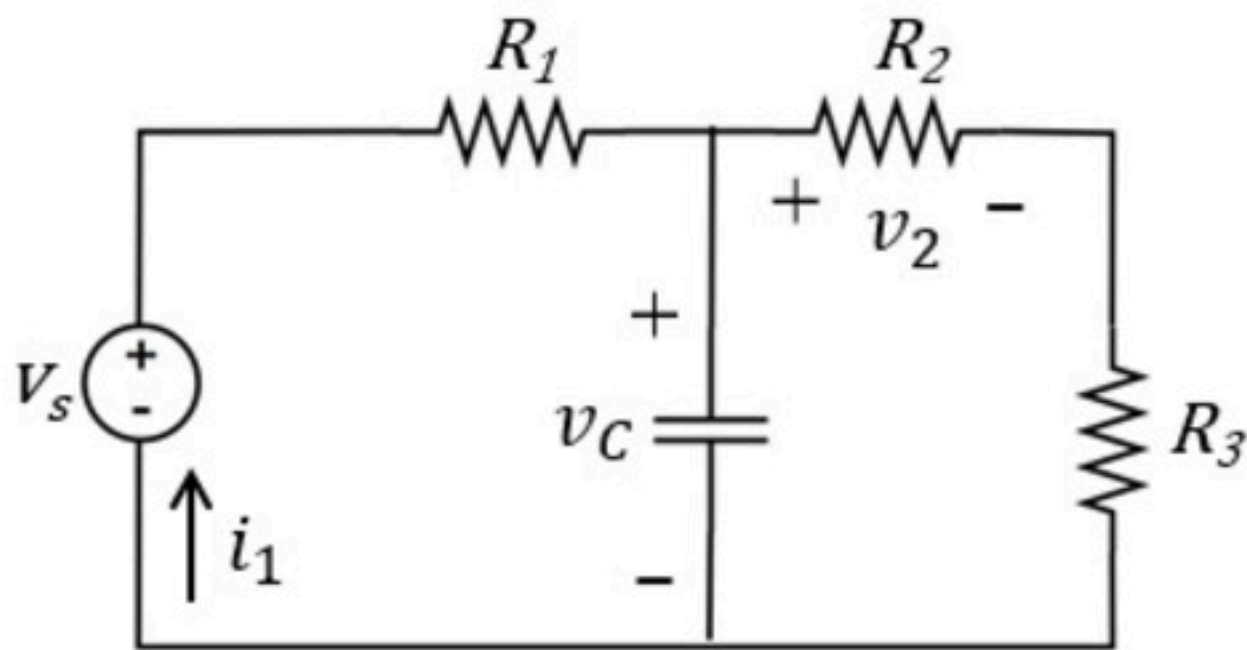
This circuit contains a capacitor (which we will cover in detail later in this course) with a voltage v_C across it.
Voltage v_2 and current i_1 will satisfy the equations shown below (as we will also see later).
Find the coefficients A, D and E.

$$v_C = 10 - 10 \cdot e^{-20t} \quad \text{V}$$

$$v_2 = A + B \cdot e^{-20t} \quad \text{V} \qquad i_1 = D + E \cdot e^{-20t} \quad \text{A}$$

Given Variables:

vs : 20 V
R1 : 20 ohm
R2 : 7 ohm
R3 : 13 ohm

Calculate the following:

A (.) :

B (.) :

D (.) :

E (.) :