$V_1 \neq V_2$.

$Q$ is een hulpelfde.

1) $C_1 = C_0 \cdot e^{-\frac{Q}{V_1}t}$.

2) $\frac{dC_2}{dt} = \frac{Q}{V_2} C_1 - \frac{Q}{V_2} C_2$

$\frac{dC_2}{dt} = \left(\frac{Q}{V_2}\right) \cdot C_0 e^{-\frac{Q}{V_1}t} - \left(\frac{Q}{V_2}\right) C_2$.

& la place transformatie

$ay' + by = R(t)$ met $y(0) = 0 \Rightarrow$

$a(sY - 0) + bY = \mathcal{L}(R(t))$

$C_2(0) = 0$ $C_2(t) = C_2(s)$ integreren links deel.

$\int_{C_2(0)}^{C_2(s)} dC_2 \rightarrow C_2(s) - 0 = C_2(s)$

$C_2 s + \frac{Q}{V_2} C_2 = \mathcal{L}\left(\frac{Q}{V_2} C_0 e^{-\frac{Q}{V_1}t}\right)$

~~$A e^{-at}$~~

$\mathcal{L}(A e^{-at}) = \frac{A}{s+a}$ $A = \frac{Q}{V_2} C_0$ $a = \frac{Q}{V_1}$

$$C_2 s + \frac{Q}{V_2} C_2 = \frac{\frac{Q}{V_2} C_0}{s + \frac{Q}{V_1}}$$

$$C_2 \left( s + \frac{Q}{V_2} \right) = \frac{\frac{Q}{V_2} C_0}{s + \frac{Q}{V_1}}$$

~~$C_2 \; s + \frac{Q}{V_2}$~~

$$C_2 = \frac{\frac{Q}{V_2} C_0}{\left(s + \frac{Q}{V_1}\right) \cdot \left(s + \frac{Q}{V_2}\right)}$$

$$\frac{A}{(s+a) \cdot (s+b)} = ?$$