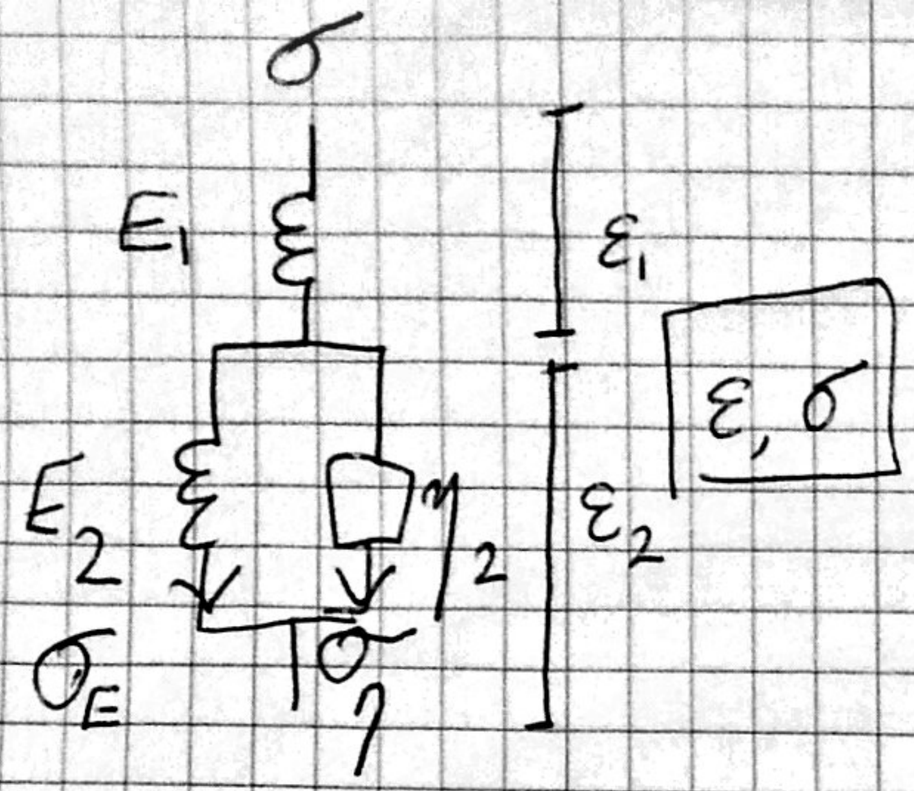

① $\varepsilon_0 = \varepsilon_1 + \varepsilon_2$, $\varepsilon = \frac{\sigma}{E_1} + \varepsilon_2$

② $\sigma = E_1 \varepsilon_1$

③ $\sigma_E = E_2 \varepsilon_2$

④ $\sigma_\eta = \eta \frac{d\varepsilon_2}{dt}$

⑤ $\sigma = \sigma_E + \sigma_\eta$

⑥ $\sigma = E_2 \varepsilon_2 + \eta \frac{d\varepsilon_2}{dt}$ (5, 3, 4).

$\sigma \sqsubset t$.

creep $\Rightarrow$ σ is constant (σ_0) $t \geq 0$, find $\varepsilon(t)$. $\mathcal{L}(\sigma) = \frac{1}{s}\sigma_0$

transform to s.

$\mathcal{L}(⑥)$ ④ $\rightarrow$ $\bar{\sigma} = E_2 \bar{\varepsilon}_2 + s\eta \bar{\varepsilon}_2$ ($\varepsilon_2(0) = 0$)

$\Rightarrow$ $\bar{\varepsilon}_2 = \frac{\bar{\sigma}}{s\eta + E_2}$

$\mathcal{L}(①)$ $\bar{\varepsilon} = \frac{\bar{\sigma}}{E_1} + \bar{\varepsilon}_2$

Substitute for $\bar{\varepsilon}_2$

$\bar{\varepsilon} = \frac{\bar{\sigma}}{E_1} + \frac{\bar{\sigma}}{s\eta + E_2}$ subs. for $\bar{\sigma}$

$\bar{\varepsilon} = \frac{\sigma_0}{E_1 s} + \frac{\sigma_0}{s(s\eta + E_2)}$ $\Rightarrow$ $\mathcal{L}\left(1 - \frac{1}{b}e^{-bt}\right) = \frac{1}{s(s+b)}$.

$\mathcal{L}^{-1}(\bar{\varepsilon}) = \varepsilon(t) = \frac{\sigma_0}{E_1} + \frac{\sigma_0}{E_2}\left(1 - e^{(E_2/\eta)t}\right)$.