Opg. 3.1

$U_{bat} := 5V$

$U_{LED} := 2V$

$I_{LED} := 20mA$

$R_{formodstand} := \frac{U_{bat} - U_{LED}}{I_{LED}} = 150\,\Omega$

$\tau = \frac{L_{spole}}{R_{formodstand}}$

$L_{spole} := \frac{1}{5}1s \cdot R_{formodstand} = 30\,H$

Opg. 3.2

$U_{bat} := 5V$

$U_{LED} := 2V$

$I_{LED} := 20mA$

$R_{formodstand} := \frac{U_{bat} - U_{LED} - U_{LED}}{I_{LED}} = 50\,\Omega$

$\tau = \frac{L_{spole}}{R_{formodstand}}$

$L_{spole} := \frac{1}{5}2s \cdot R_{formodstand} = 20\,H$