



$$\text{KVL: } (I_A(s) + \frac{V_A}{R \cdot s})sL + I_A(s) \cdot 2R = 0$$

$$\Downarrow \quad \frac{V_A \cdot L}{R} + I_A(s)(sL + 2R) = 0 \Rightarrow I_A(s) = -\frac{\frac{V_A \cdot L}{R}}{sL + 2R}$$

$$I_A(s) = -\frac{\frac{V_A}{R}}{s + \frac{2R}{L}} \Rightarrow V_O(s) = \frac{-V_A}{s + \frac{2R}{L}}$$

Den strøm i_L der skal beregnes er modsat rettet $I_A(s)$

$$\text{dvs. } I_L(s) = \frac{\frac{V_A}{R}}{s + \frac{2R}{L}}$$