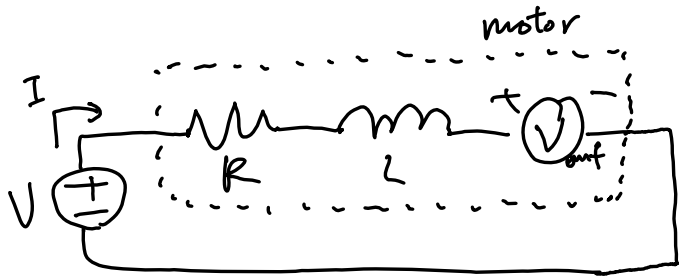


$$T = k_t \cdot I \quad (1)$$

$$V_{\text{emf}} = k_e \cdot \omega \quad (2)$$



$$V = IR + V_{\text{emf}}$$

$$V = \frac{T}{k_T} \cdot R + k_e \cdot \omega$$

(1), (2)

$$V - \frac{T}{k_T} R = k_e \cdot \omega$$

$$\omega = \frac{V}{k_e} - \frac{R}{k_e k_T} \cdot T = \boxed{\omega_{NL} - R_M \cdot T}$$

