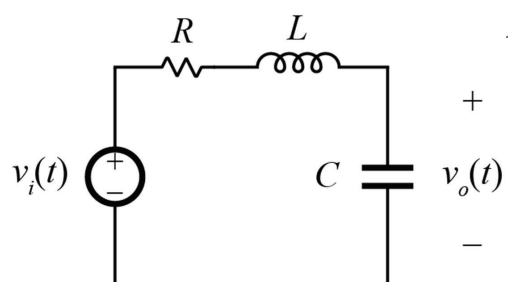


# Repeated Roots: Differentiation

## PFE: Complex Roots

## Example



$$v_i(t) = \sin(2t) u(t)$$

$$L = 500\text{mH}, \quad C = 500\mu\text{F}, \quad R = 2\Omega$$

$$v_c(0) = 5\text{V}, \quad i_L(0) = -2\text{A}$$

