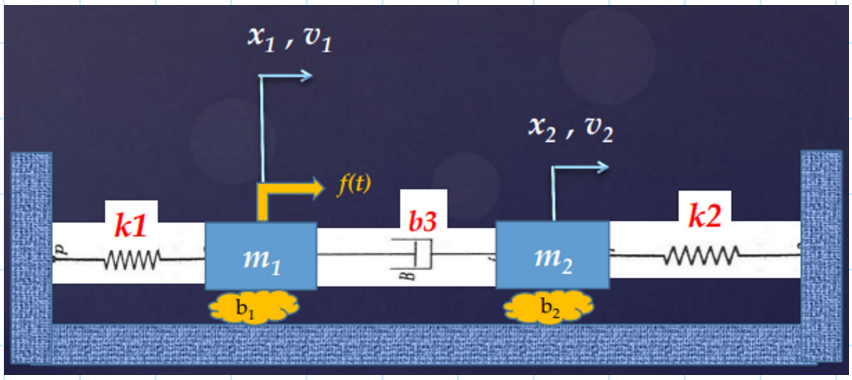
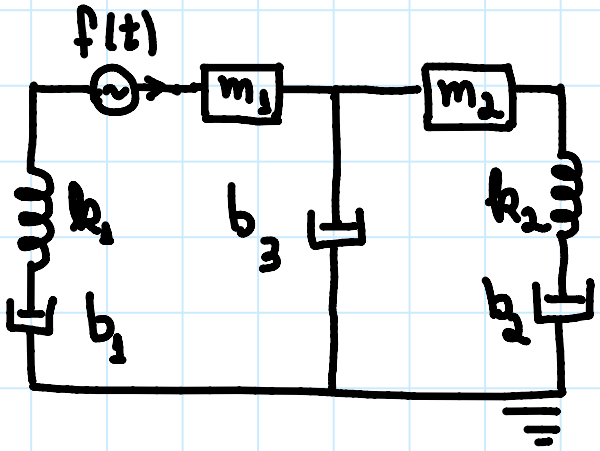
Exercício 5 - Slide analogia tipo 2

quarta-feira, 6 de outubro de 2021 19:12

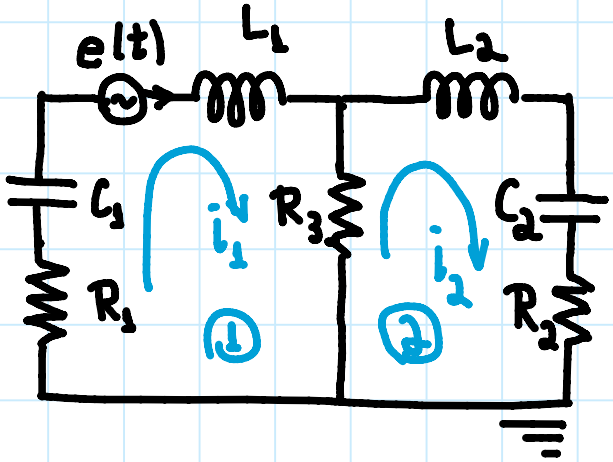
Ex.5



b) • Circuito mecânico:



c) • Circuito elétrico análogo:



d) • Malha ①: $\left(L_1 D + R_1 + R_3 + \frac{1}{C_1 D}\right) i_1 - R_3 i_2 = e(t)$ (I)

• Malha ②: $\boxed{\left(L_2 D + R_2 + R_3 + \frac{1}{C_2 D}\right) i_2 - R_3 i_1 = 0}$ (II)

c) • De analogia tipo 2:

→ Eq (I): $\boxed{m_1 \ddot{x}_1 + (b_1 + b_3)\dot{x}_1 + k_1 x_1 = f(t) + b_3 \dot{x}_2}$

→ Eq (III): $\boxed{m_2 \ddot{x}_2 + (b_2 + b_3)\dot{x}_2 + k_2 x_2 = b_3 \dot{x}_1}$