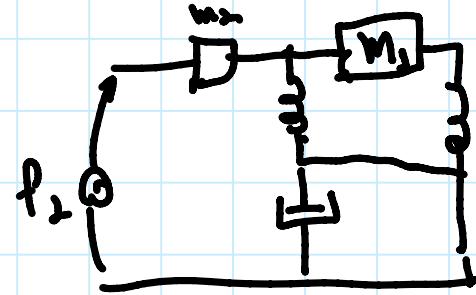
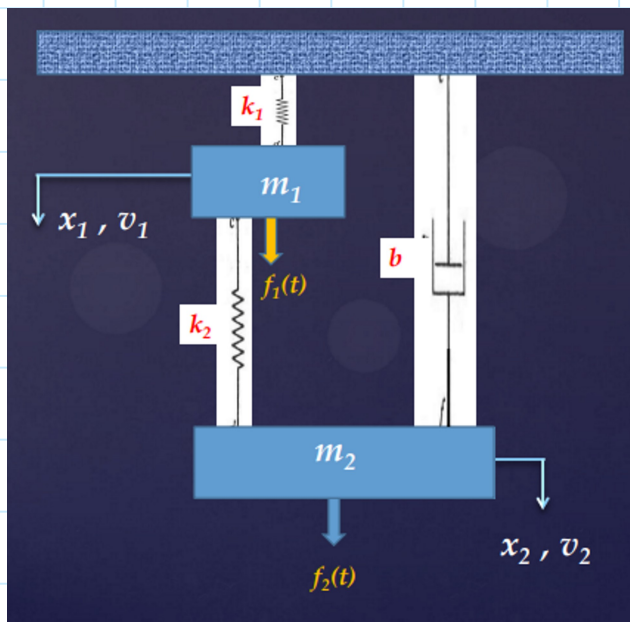


Exercício 4 - Slide analogia tipo 2

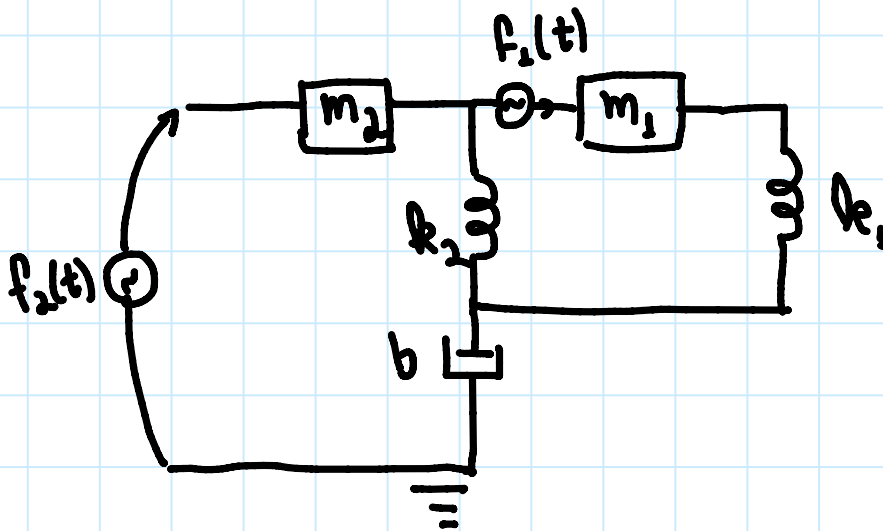
quarta-feira, 6 de outubro de 2021

18:35

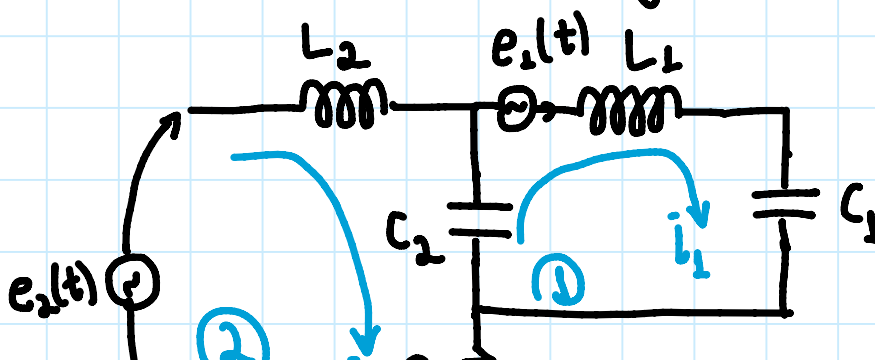
Ex. 4

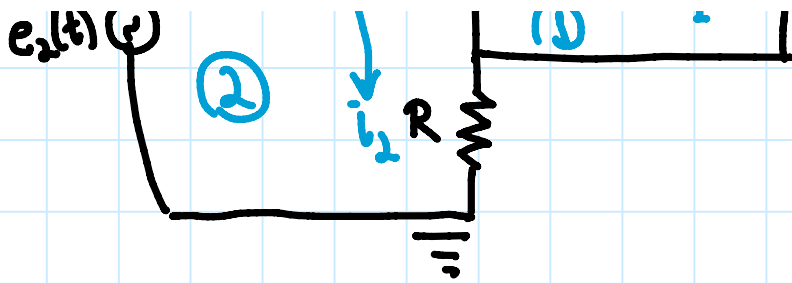


b) • Circuito mecânico:



c) • Circuito elétrico análogo:





d) • Malha ①:
$$\left(L_1 D + \frac{1}{C_1 D} + \frac{1}{C_2 D} \right) i_1 - \frac{1}{C_2 D} i_2 = e_1(t) \quad (I)$$

• Malha ②:
$$\left(L_2 D + R + \frac{1}{C_2 D} \right) i_2 - \frac{1}{C_2 D} i_1 = e_2(t) \quad (II)$$

e) • Da analogia tipo 1:

→ Eq (I):
$$m_1 \ddot{x}_1 + (k_1 + k_2) x_1 = f_1(t) + k_2 x_2$$

→ Eq (II):
$$m_2 \ddot{x}_2 + b \dot{x}_2 + k_2 x_2 = f_2(t) + k_2 x_1$$