



See Ch. 6.A
for details on
forces on springs
and dashpots

$$A: \rightarrow \Sigma F_x: -k_1 x_A - k_2 x_A + k_2 x_B = m \ddot{x}_A$$

$$B: \rightarrow \Sigma F_x: -k_4 x_B - k_3 x_B - k_2 x_B + k_2 x_A = m \ddot{x}_B$$

$$\text{EOM} \begin{cases} m \ddot{x}_A + \underbrace{k_2(x_A - x_B)} + k_1 x_A = 0 \\ m \ddot{x}_B + \underbrace{k_2(x_B - x_A)} + (k_3 + k_4)x_B = 0 \end{cases}$$

coupling terms