Assignment 2 (Due Feb 9)

1. Derive the equations of motion for the following spring-mass systems



2. Find the natural frequencies for the torsional system shown in below for $J_1=J_0$, $J_2=2J_0$, and $k_{t1}=k_{t2}=k_t$



3. Problem 2.3 (part 1 and 2)