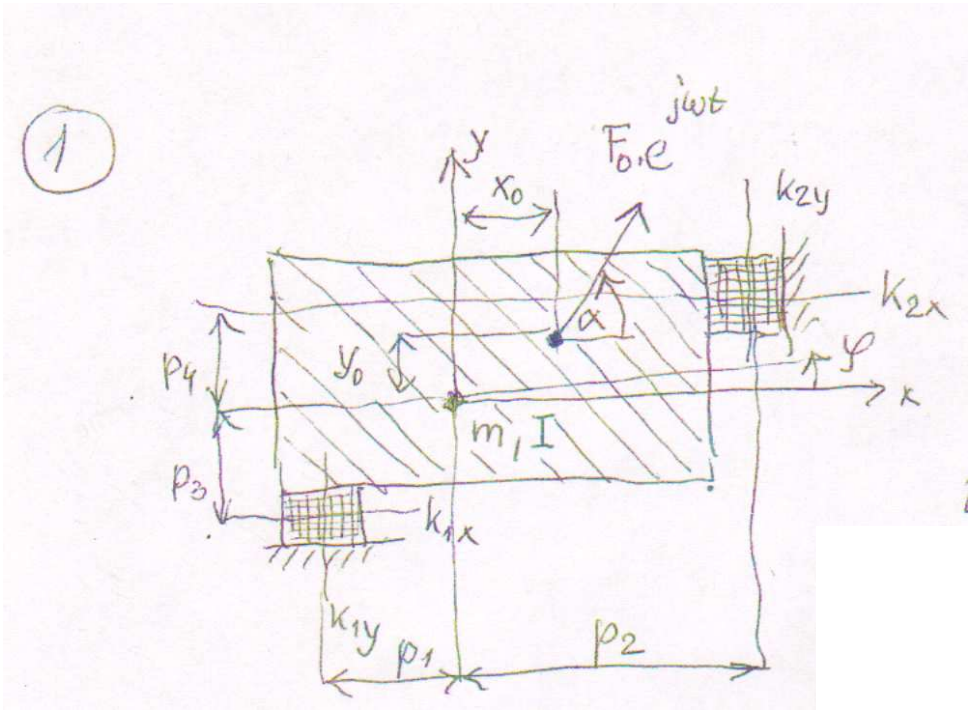

Given: mass m, mass moment of inertia I, stiffnesses k_{ix}, k_{iy}, dimensions p_i and x_0 , y_0, F_0, , α, ω, constant κ for damping $B=\kappa.K$

Determine:

1. system of equations of motions
2. system of equations of motions in matrix form
3. calculation of natural frequencies in matrix form
4. calculation of amplitudes of steady state oscillations in matrix form