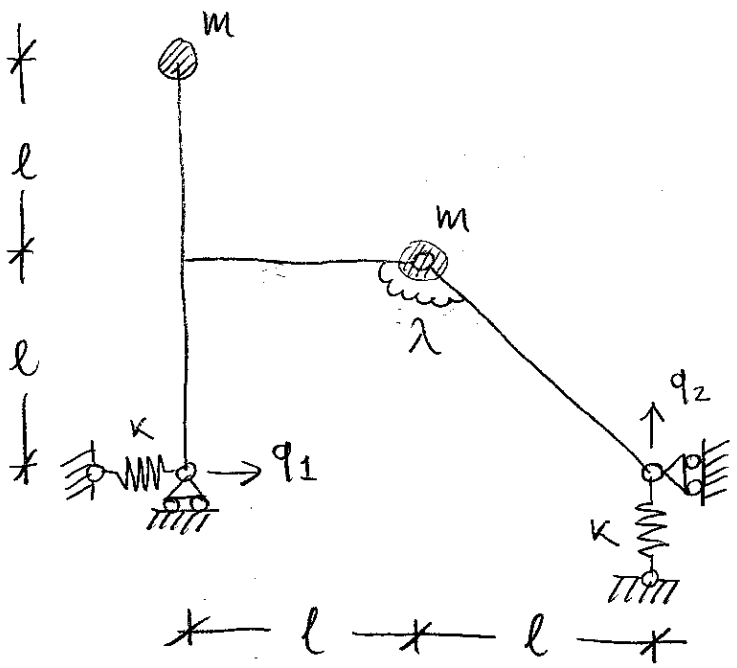
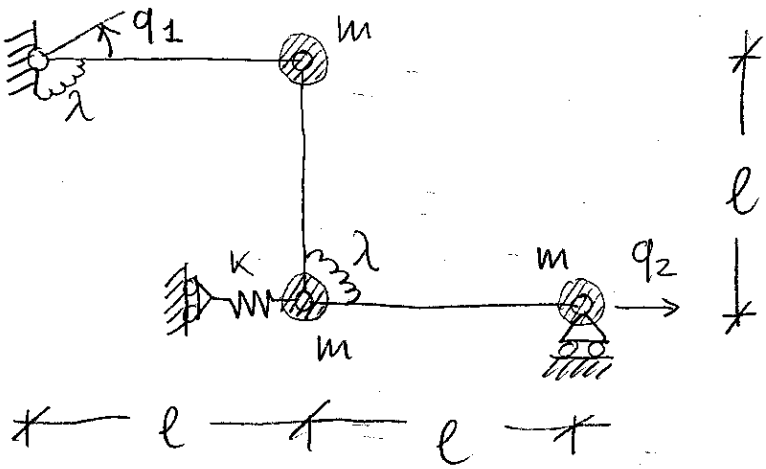



R.

$$\underset{\sim}{K} = \begin{bmatrix} k + \frac{\lambda}{\ell^2} & 0 \\ 0 & k \end{bmatrix}$$

$$\underset{\sim}{M} = \begin{bmatrix} \frac{1}{2}m & 0 \\ 0 & \frac{3}{2}m \end{bmatrix}$$




R.

$$\underset{\sim}{K} = \begin{bmatrix} 2\lambda & \lambda/\ell \\ \lambda/\ell & k + \frac{\lambda}{\ell^2} \end{bmatrix}$$

$$\underset{\sim}{M} = \begin{bmatrix} 2m\ell^2 & 0 \\ 0 & 2m \end{bmatrix}$$