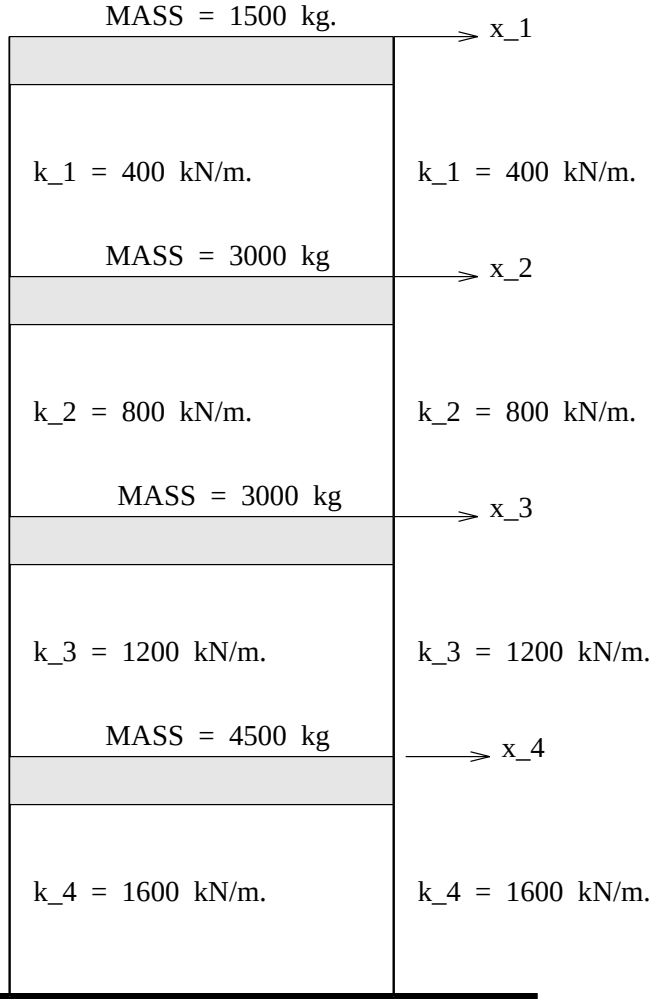

$$\text{STIFFNESS} = \begin{bmatrix} 800 & -800 & & \\ -800 & 2400 & -1600 & \\ & -1600 & 4000 & -2400 \\ & & -2400 & 5600 \end{bmatrix} \text{kN/m.}$$

$$\text{MASS} = \begin{bmatrix} 1500 & & & \\ & 3000 & & \\ & & 3000 & \\ & & & 4500 \end{bmatrix} \text{kg}$$