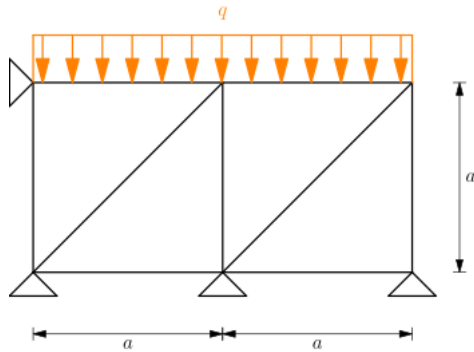


## Introducción a elementos finitos

### Examen final II-2016

1. ???



**Solución**

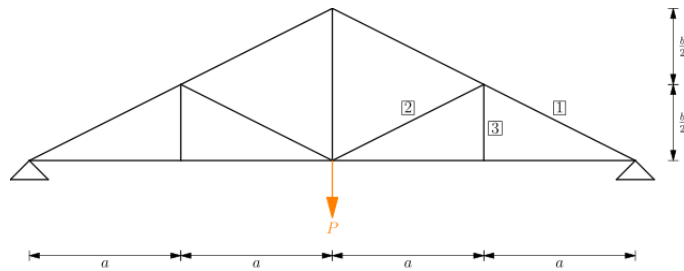
La matriz de rigidez es

$$K = \int_{x_i}^{x_{i+1}} \int_{y_i}^{y_{i+1}} B^T C B t \, dy \, dx$$

La matriz constitutiva es

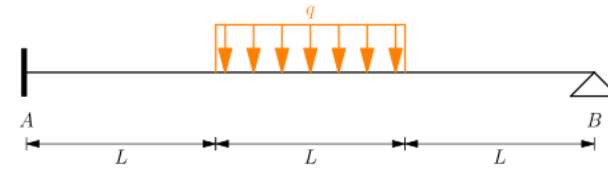
$$C = \frac{E}{1-\nu^2} \begin{bmatrix} 1 & \nu & 0 \\ \nu & 1 & 0 \\ 0 & 0 & \frac{1-\nu}{2} \end{bmatrix}$$

2. ???



**Solución**

3. ???



**Solución**

4. ???

**Solución**