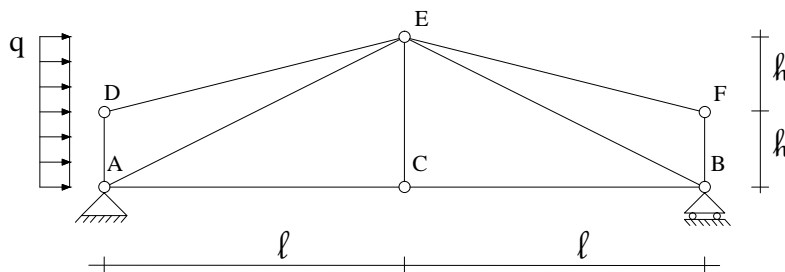


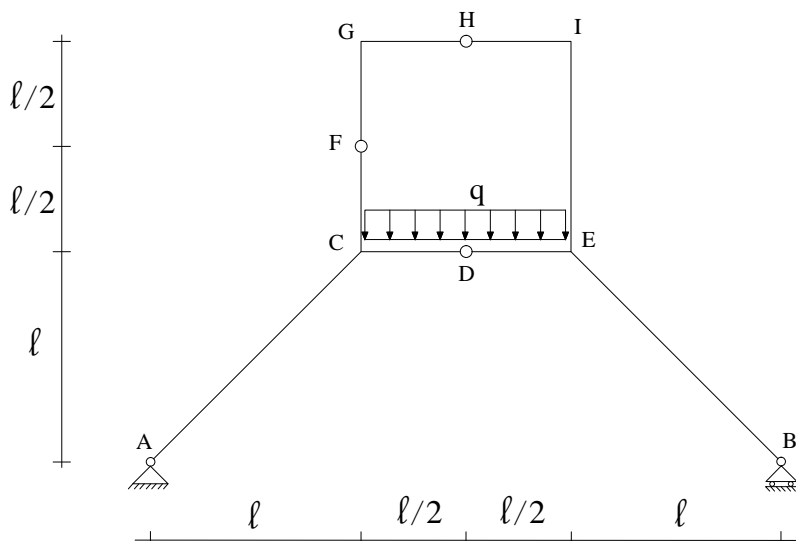
The diagram shows a frame structure with a distributed load  $q$  acting horizontally on the left vertical member. The structure consists of a left vertical member (A-E), a top horizontal member (E-F), a right vertical member (F-B), and a bottom horizontal member (A-B). The left vertical member is divided into two equal segments of height  $h$  by a horizontal member (C-D). The bottom horizontal member has a length  $l$ . The joints are labeled A (bottom left), B (bottom right), C (middle left), D (middle right), E (top left), and F (top right). The supports are a pin support at A and a roller support at B. The distributed load  $q$  is represented by a series of horizontal arrows pointing to the right, acting on the left vertical member.

$$\ell = 5 \text{ m}$$
$$q = 20 \text{ kN/m}$$

- Calcolare le azioni interne N, T, M delle aste;
- Calcolare lo spostamento orizzontale del nodo D.


$$\begin{aligned}\ell &= 3 \text{ m} \\ h &= 1 \text{ m} \\ q &= 20 \text{ kN/m}\end{aligned}$$

- Calcolare le azioni interne N, T, M (sia primarie che secondarie);
- Calcolare lo spostamento orizzontale del nodo B.


$$\ell = 4 \text{ m}$$
$$q = 30 \text{ kN/m}$$

- Calcolare le azioni interne N, T, M ;
- Calcolare lo spostamento orizzontale nel nodo B.