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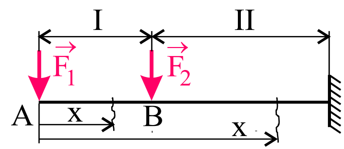
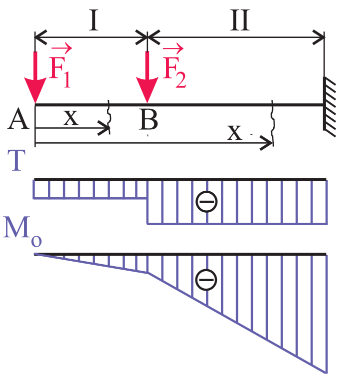
Classification of the bar: straight, loaded by external forces, supported.
Statical analysis: $\mu = 3, \quad \nu = 3$ (a general in-plane system of forces)
$$s = \mu - \nu = 3 - 3 = 0$$

Now we usually isolate the bar as a free body and calculate the reactions in supports.

The bar has a free end $\Rightarrow$ we need not to calculate the reactions, we can isolate elements containing this free end. We divide the bar into two intervals in the point of action of the force $\vec{F}_2$ which is a discontinuity point of the load function.





Inner resultants in the interval I: $x \in (0; a)$

$F_x: \quad N(x) = 0,$
$F_z: \quad T(x) = -F_1$
$M_y: \quad M_o(x) = -F_1 x$

Inner resultants in the interval II: $x \in (a; l)$

$F_x: \quad N(x) = 0,$
$F_z: \quad T(x) = -F_1 - F_2,$
$M_y: \quad M_o(x) = -F_1 x - F_2(x - a),$

integral approach

Evaluation of inner resultants in the point B:

The shear force is not defined unambiguously in the point B, the function $T(x)$ is discontinuous in this point.
The bending moment $M_o(x)$ has a value of $M_o(x = a) = -F_1 a$ in the point B.