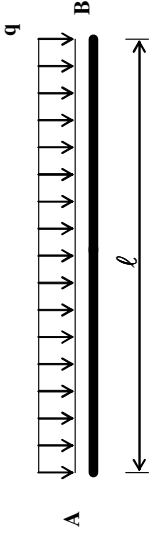
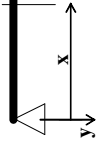
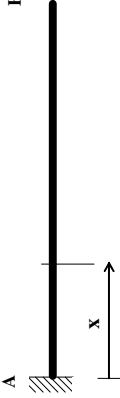
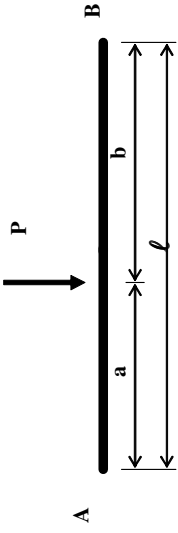
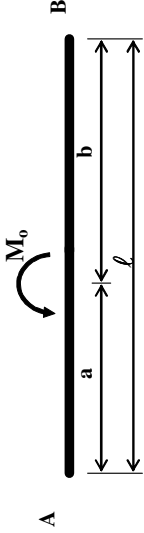


Deflexões (y) e Inclinações (y') em Vigas

| Condições de contorno | A | B |
|---|--|---|
| <p>Caso de Carregamento</p>  |  |  |
|  | $y = \frac{qx^2}{24EJ}(\ell^3 - 2\ell x^2 + x^3)$ $y' = \frac{q}{24EJ}(\ell^3 - 6\ell x^2 + 4x^3)$ $y'_a = -y'_b = \frac{q\ell^3}{24EJ}; \delta_{\max} = \frac{5q\ell^4}{384EJ}$ | $y = \frac{Px^2}{6EJ}(3a - x); y' = \frac{Px}{2EJ}(2a - x), \text{ para } 0 < x < a$ $y = \frac{Pa^2}{6EJ}(3x - a); y' = \frac{Pa^2}{2EJ}, \text{ para } a < x < \ell$ $y'_b = \frac{Pa^2}{2EJ}; y_b = \frac{Pa^2}{6EJ}(3\ell - a)$ |
|  | $y = \frac{Pbx}{6\ell EJ}(\ell^2 - b^2 - x^2); \text{ para } 0 < x < a$ $y' = \frac{Pb}{6\ell EJ}(\ell^2 - b^2 - 3x^2); \text{ para } 0 < x < a$ $y'_a = \frac{Pab}{6\ell EJ}(\ell + b); y'_b = \frac{-Pab}{6\ell EJ}(\ell + a)$ $y_{\max} = \frac{Pb(\ell^2 - b^2)^{3/2}}{9\sqrt{3}\ell EJ} \text{ se } a \geq b$ | $y = \frac{M_0 x}{6\ell EJ}(6a\ell - 3a^2 - 2\ell^2 - x^2)$ $y' = \frac{M_0}{6\ell EJ}(6a\ell - 3a^2 - 2\ell^2 - 3x^2);$ <p style="text-align: center;">para $0 < x < a$</p> |