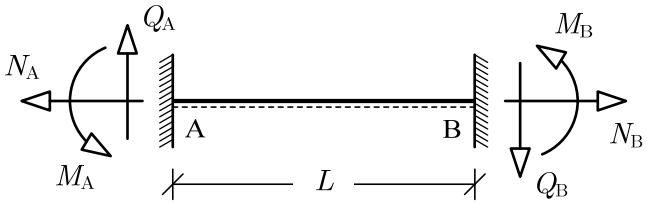
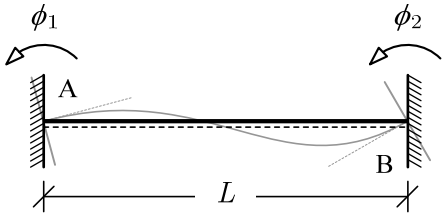
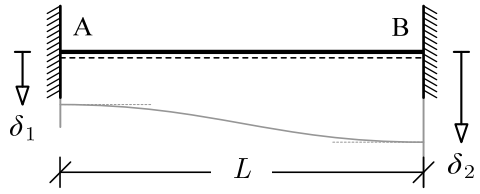
# ΑΚΡΑΙΕΣ ΔΡΑΣΕΙΣ ΑΜΦΙΠΑΚΤΩΝ ΔΟΚΩΝ



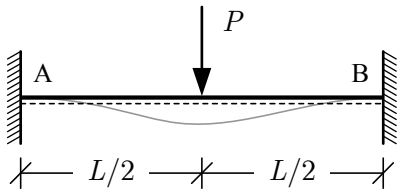

$$M_A = \frac{2EI}{L}\left(2\phi_1 + \phi_2\right), \qquad Q_A = \frac{6EI}{L^2}\left(\phi_1 + \phi_2\right)$$

$$M_B = \frac{2EI}{L}\left(\phi_1 + 2\phi_2\right), \qquad Q_B = \frac{6EI}{L^2}\left(\phi_1 + \phi_2\right)$$



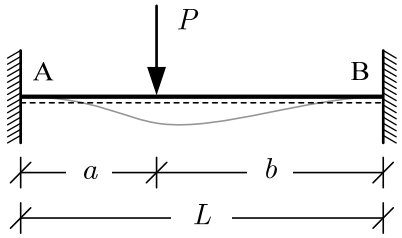

$$M_A = \frac{6EI}{L^2}\left(\delta_2 - \delta_1\right), \qquad Q_A = \frac{12EI}{L^3}\left(\delta_2 - \delta_1\right)$$

$$M_B = \frac{6EI}{L^2}\left(\delta_2 - \delta_1\right), \qquad Q_B = \frac{12EI}{L^3}\left(\delta_2 - \delta_1\right)$$



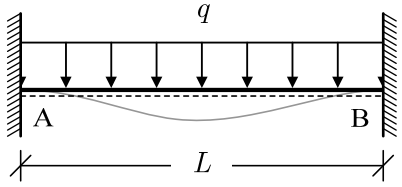

$$M_A = \frac{PL}{8}, \qquad Q_A = \frac{P}{2}$$

$$M_B = -\frac{PL}{8}, \qquad Q_B = -\frac{P}{2}$$



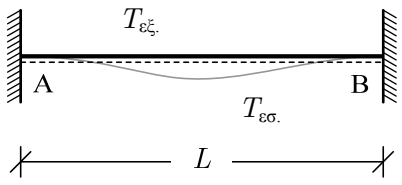

$$M_A = \frac{Pab^2}{L^2}, \qquad Q_A = \frac{Pb^2}{L^2}\left(3 - \frac{2b}{L}\right)$$

$$M_B = -\frac{Pa^2b}{L^2}, \qquad Q_B = -\frac{Pa^2}{L^2}\left(3 - \frac{2a}{L}\right)$$




$$M_A = \frac{qL^2}{12}, \qquad Q_A = \frac{qL}{2}$$

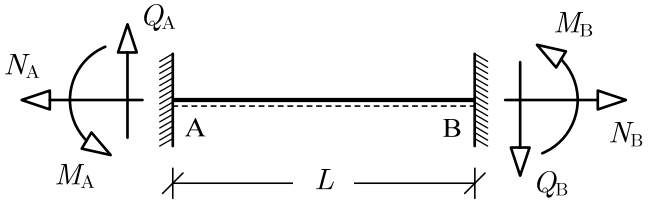
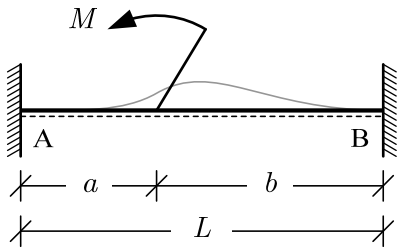
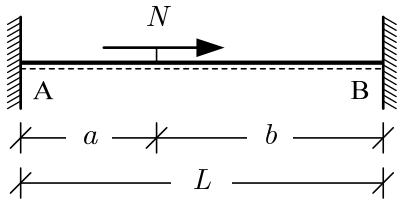
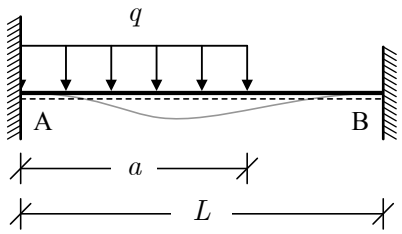
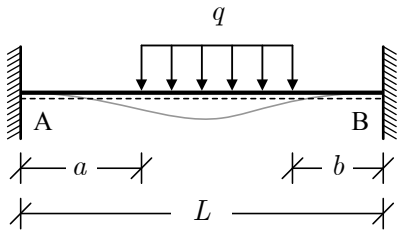
$$M_B = -\frac{qL^2}{12}, \qquad Q_B = -\frac{qL}{2}$$




$$M_A = \frac{\alpha EI}{h}\delta T\,, \qquad N_A = -\alpha EA\,\Delta T_c$$

$$M_B = -\frac{\alpha EI}{h}\delta T\,, \qquad N_B = -\alpha EA\,\Delta T_c$$

$$\delta T = T_{\varepsilon\sigma.} - T_{\varepsilon\xi.}\,, \qquad \Delta T_c = \frac{T_{\varepsilon\sigma.} + T_{\varepsilon\xi.}}{2} - T_0$$

| **ΑΚΡΑΙΕΣ ΔΡΑΣΕΙΣ ΑΜΦΙΠΑΚΤΩΝ ΔΟΚΩΝ** |  |
|---|---|
|  | $M_A = \frac{Mb}{L}\left(2-\frac{3b}{L}\right), \qquad Q_A = \frac{6Mab}{L^3}$<br>$M_B = \frac{Ma}{L}\left(2-\frac{3a}{L}\right), \qquad Q_B = \frac{6Mab}{L^3}$ |
|  | $N_A = \frac{b}{L}N\,, \qquad N_B = -\frac{a}{L}N$ |
|  | $M_A = \frac{qa^2}{12L^2}\left(6L^2-8aL+3a^2\right)$<br>$M_B = -\frac{qa^3}{12L^2}\left(4L-3a\right)$<br>$Q_A = \frac{qa}{2L^3}\left(2L^3-2a^2L+a^3\right), \quad Q_B = -\frac{qa^3}{2L^3}\left(2L-a\right)$ |
|  | $M_A = \frac{q}{12L^2}\left[L^4-b^3\left(4L-3b\right)-a^2\left(6L^2-8aL+3a^2\right)\right]$<br>$M_B = -\frac{q}{12L^2}\left[L^4-a^3\left(4L-3a\right)-b^2\left(6L^2-8bL+3b^2\right)\right]$<br>$Q_A = \frac{q}{2L^3}\left[L^4-b^3\left(2L-b\right)-a\left(2L^3-2a^2L+a^3\right)\right]$<br>$Q_B = -\frac{q}{2L^3}\left[L^4-a^3\left(2L-a\right)-b\left(2L^3-2b^2L+b^3\right)\right]$ |