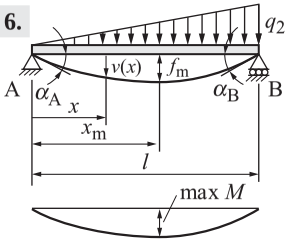
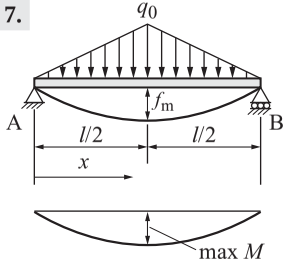
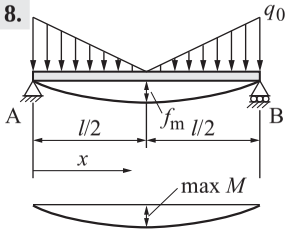
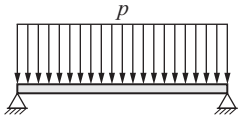
Kuormitustapaus Taivutusmomenttikuvio	Tukireaktiot Taivutusmomentti	Taipumaviiva
6. 	$A = \frac{lq_2}{6}$ $B = \frac{lq_2}{3}$ $M(x) = \frac{q_2 lx}{6}\left(1 - \frac{x^2}{l^2}\right)$ $\max M = \frac{q_2 l^2}{9\sqrt{3}}$ kun $x = \frac{l}{\sqrt{3}}$	$v(x) = \frac{q_2 l^4}{360EI}\left[7\frac{x}{l} - 10\left(\frac{x}{l}\right)^3 + 3\left(\frac{x}{l}\right)5\right]$ $f_m = \frac{q_2 l^4}{153{,}3EI}$ kun $x_m = 0{,}519l$ $\alpha_A = \frac{7}{360}\frac{q_2 l^3}{EI}$ $\alpha_B = \frac{8}{360}\frac{q_2 l^3}{EI}$
7. 	$A = B = \frac{q_0 l}{4}$ $0 \le x \le \frac{l}{2}$: $M(x) = \frac{q_0 l^2}{12}\left(\frac{3x}{l} - \frac{4x^3}{l^3}\right)$ $\max M = \frac{q_0 l^2}{12}$	$0 \le x \le \frac{l}{2}$: $v(x) = \frac{q_0 x}{960lEI}(5l^2 - 4x^2)^2$ $f_m = \frac{q_0 l^4}{120EI}$ kohdassa $x_m = \frac{l}{2}$ $\alpha_A = \alpha_B = \frac{5q_0 l^3}{192EI}$
8. 	$Q = \frac{q_0 l}{2}$ $A = B = \frac{q_0 l}{4}$ $0 \le x \le \frac{l}{2}$: $M(x) = \frac{q_0}{12}\left(3xl - 6x^2 + \frac{4x^3}{l}\right)$ $\max M = \frac{q_0 l^2}{24}$ kun $x = \frac{l}{2}$	$0 \le x \le \frac{l}{2}$: $v(x) = \frac{q_0}{960EI}(15xl^3 - 40x^3 l + 40x^4 - 16x^5 / l)$ $f_m = \frac{3q_0 l^4}{640EI}$ kohdassa $x_m = \frac{l}{2}$ $\alpha_A = \alpha_B = \frac{q_0 l^3}{64EI}$

6.



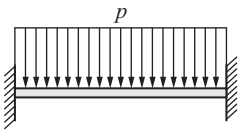
Keskellä: $y_c = \dfrac{-pa^4(5+\nu)}{64D(1+\nu)}$

$M_c = \dfrac{pa^2(3+\nu)}{16} \qquad \sigma_{max} = \sigma_r = \sigma_t = \dfrac{3pa^2(3+\nu)}{8t^2}$

Reunalla:

$\theta_a = \dfrac{pa^3}{8D(1+\nu)} \qquad M_t = \dfrac{pa^2(1-\nu)}{8} \qquad \sigma_{ta} = \dfrac{3pa^2(1-\nu)}{4t^2}$

7.



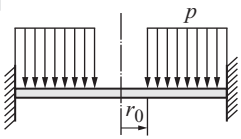
Keskellä: $y_c = \dfrac{-pa^4}{64D}$

$M_c = \dfrac{pa^2(1+\nu)}{16} \qquad \sigma_c = \dfrac{3pa^2(1+\nu)}{8t^2}$

Reunalla:

$M_{ra} = \dfrac{-pa^2}{8} \qquad \sigma_{ra} = \dfrac{-3pa^2}{4t^2} \qquad \sigma_{ta} = \dfrac{-3\nu pa^2}{4t^2}$

8.

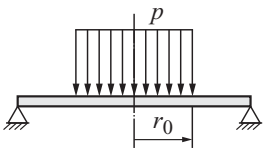


$y_a = 0 \qquad \theta_a = 0 \qquad y_c = \dfrac{-pa^4}{2D}(L_{14} - 2L_{11})$

$M_c = pa^2(1+\nu)L_{14}$

$M_{ra} = \dfrac{-p}{8a^2}(a^2 - {r_0}^2)^2 \qquad \sigma_{ra} = \dfrac{-3p}{4a^2t^2}(a^2 - {r_0}^2)^2$

9.



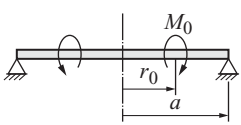
$y_c = \dfrac{pa^2{r_0}^2}{64D(1+\nu)}\gamma_3 \qquad \theta_a = \dfrac{par_0{}^2}{8D(1+\nu)}\left(2 - \dfrac{{r_0}^2}{a^2}\right)$

$M_{rc} = \dfrac{pa^2}{16}\gamma_2 \qquad M_{ta} = \dfrac{pr_0{}^2}{8}(1-\nu)\left(2 - \dfrac{{r_0}^2}{a^2}\right)$

$\gamma_2 = \left[4 - (1-\nu)\dfrac{{r_0}^2}{a^2} - 4(1+\nu)\ln\dfrac{r_0}{a}\right]\dfrac{{r_0}^2}{a^2}$

$\gamma_3 = 4(3+\nu) - (7+3\nu)\dfrac{{r_0}^2}{a^2} + 4(1+\nu)\dfrac{{r_0}^2}{a^2}\ln\dfrac{r_0}{a}$

10.



$y_c = \dfrac{M_0{r_0}^2}{2D}\left(\dfrac{1}{1+\nu} + \ln\dfrac{a}{r_0}\right)$

$M_c = \dfrac{-M_0}{2}\left[1 + \nu + (1-\nu)\left(\dfrac{r_0}{a}\right)^2\right] \qquad \theta_a = \dfrac{-M_0{r_0}^2}{Da(1+\nu)}$