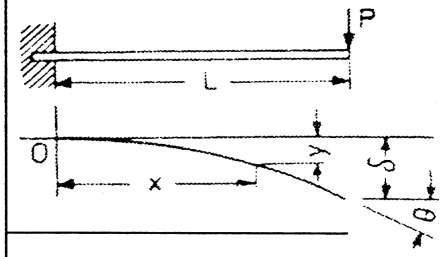
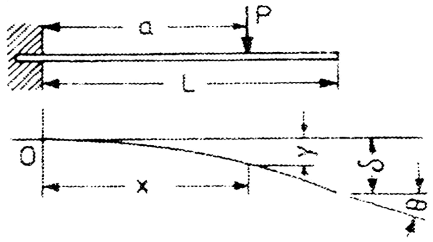
BAZI ORTAK KESİTLERİN ÖZELLİKLERİ



$$y = \frac{Px^2}{6\,EI}(3L-x)$$

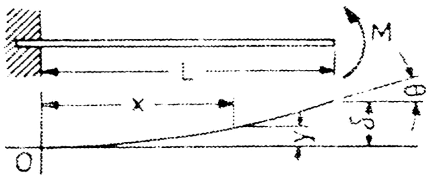
$$\theta = \frac{PL^2}{2\,EI} \qquad \delta = \frac{PL^3}{3\,EI}$$



$x \le a$ ise $\quad y = \frac{Px^2}{6\,EI}(3a-x)$

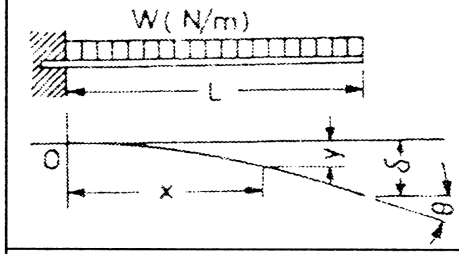
$x < a$ ise $\quad y = \frac{Px^2}{6\,EI}(3a-x) + \frac{P}{6\,EI}(x-a)^3$

$$\theta = \frac{Pa^2}{2\,EI} \qquad \delta = \frac{Pa^2}{2\,EI}(3L-a)$$



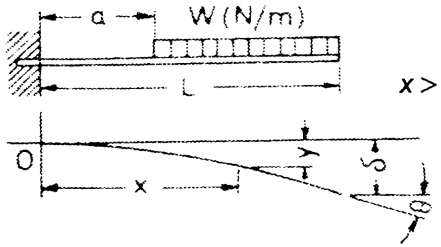
$$y = \frac{Mx^2}{2\,EI}$$

$$\theta = -\frac{ML}{EI} \qquad \delta = \frac{ML^2}{2\,EI}$$



$$y = \frac{wx^2}{12\,EI}(x^2+6L^2-4Lx)$$

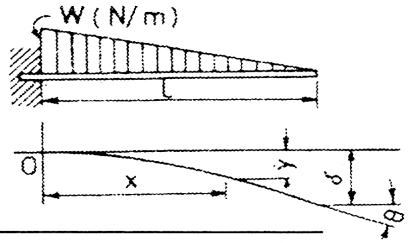
$$\theta = \frac{wL^3}{6\,EI} \qquad \delta = \frac{wL^4}{8\,EI}$$



$y \le a$ ise $y = \frac{w(L-a)x^2}{12\,EI}[3(L+a)2-x)]$

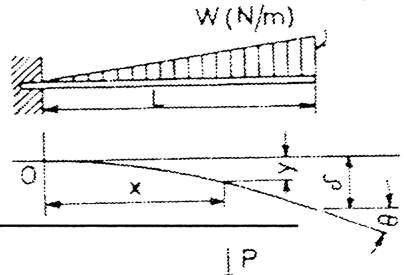
$x > a$ ise $y = \frac{w(L-a)x^2}{12\,EI}[3(L+a)2-x)] + \frac{w}{24\,EI}(x-a)^4$

$$\theta = \frac{w}{6\,EI}(L^3-a^3) \qquad \delta = \frac{w}{24\,EI}(3L^4-4a^3L+a^4)$$



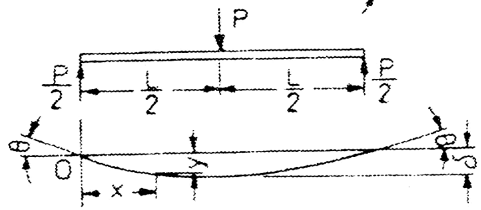
$$y = \frac{w}{120\,EIL}[(L-x)^5 + 5L^4x - L^5)$$

$$\theta = \frac{wL^3}{24\,EI} \qquad \delta = \frac{wL^4}{30\,EI}$$



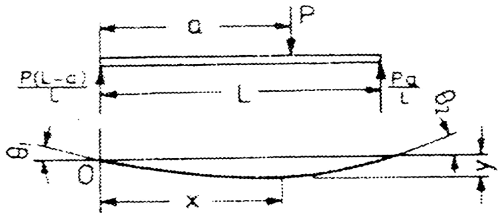
$$y = \frac{wx^2}{120\,EIL}(x^3 - 10L^2x + 20L^3)$$

$$\theta = \frac{wL^3}{8\,EI} \qquad \delta = \frac{11wL^4}{120\,EI}$$



$x \le \frac{L}{2}$ ise $y = \frac{P}{48\,EI}(3L^2x-4x^3)$

$$\theta = \frac{PL^2}{16\,EI} \qquad \delta = \frac{PL^3}{48\,EI}$$



$x \le a$ ise $y = \frac{P(L-a)x}{6\,EIL}[a(2L-a)-x^2]$

$x < a$ ise

$y = \frac{P(L-a)x}{6\,EIL}[a(2L-a)-x^2] + \frac{P}{6\,EI}(x-a)^3$

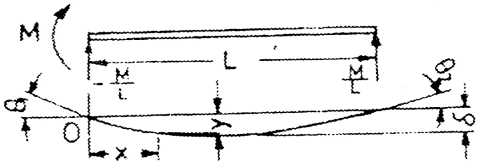
$\theta_1 = \frac{Pa}{6\,EIL}(L-a)(2L-a) \quad \theta_2 = \frac{Pa}{6\,EIL}(L^2-a^2)$

$a \ge \frac{L}{2}$: ise y (orta nokta) $= \frac{P(L-a)}{48\,EI}(8aL-L^2-4a^2)$

$a \ge \frac{L}{2} : y]_3 = \frac{L}{2} = \frac{P(L-a)}{48\,EI}(8aL-L^2-4a^2)$

$a \le \frac{L}{2}$: ise y (orta nokta) $= \frac{Pa}{48\,EI}(3a^2-4a^2)$

$a \le \frac{1}{2} : y]_X = \frac{L}{2} = \frac{Pa}{48\,EI}(3L^2-4a^2)$



$$y = \frac{Mx}{6\,EIL}(L-x)(2L-x)$$

$$\theta_1 = \frac{ML}{3\,EI} \quad \theta_2 = \frac{ML}{6\,EI}$$

$$\delta = \frac{\sqrt{3}\,ML^2}{27\,EI} \qquad y \text{ (orta nokta)} = \frac{ML^2}{16\,EI}$$