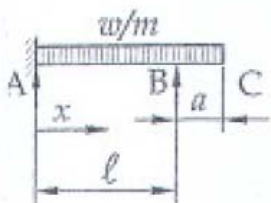



Beams with overhung ends (continued)		$\alpha = a/\ell$ $\beta = b/\ell$ $\gamma = c/\ell$ $\delta = x/\ell$	
Loading	Reactions	Bending moments	Deflections
	$A = w \cdot (\ell + a) - B$ $B = \frac{w}{8\ell} \cdot (6a^2 + 8a\ell + 3\ell^2)$	$M_A = -\frac{w(a+\ell)^2}{2} + B\ell$ $M_B = -\frac{wa^2}{2}$	$\Delta_C = \frac{w\ell^4}{48EI} \left( (8\alpha^4 + 6\alpha^3 - \alpha) - 2\alpha^4 \right)$ $\Delta_x = \frac{w\ell^4}{48EI} \left( 2\delta^4 + (6\alpha^2 - 5)\delta^3 - (6\alpha^2 - 3)\delta^2 \right)$

Propped cantilever

	$A = \frac{5W}{8}$ $B = \frac{3W}{8}$ $W = w\ell$	$+M_{\max} = M_C = \frac{9W\ell}{128}$ at $x = \frac{5\ell}{8}$ $M_A = -\frac{W\ell}{8}$ $M_x = -\frac{W\ell}{8} (1 - 5\delta + 4\delta^2)$	$\Delta_{\max} = \frac{W\ell^3}{185EI}$ at $x = 0,579\ell$ $\Delta_x = \frac{W\ell x^2}{48EI} (3 - 5\delta + 2\delta^2)$
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