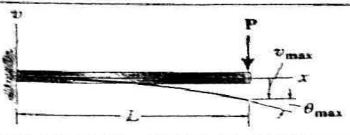
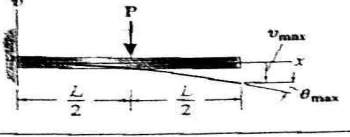
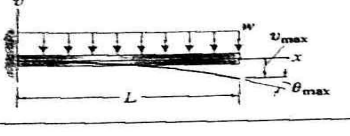
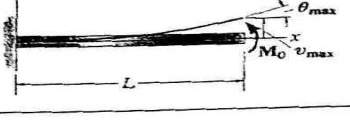
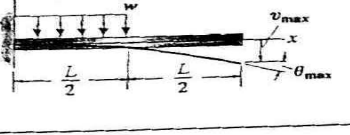
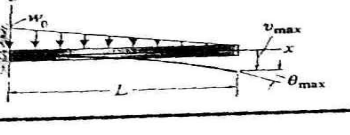


Cantilevered Beam Slopes and Deflections

Beam	Slope	Deflection	Elastic Curve
	$\theta_{\max} = \frac{-PL^2}{2EI}$	$v_{\max} = \frac{-PL^3}{3EI}$	$v = \frac{-Px^2}{6EI}(3L - x)$
	$\theta_{\max} = \frac{-PL^2}{8EI}$	$v_{\max} = \frac{-5PL^3}{48EI}$	$v = \frac{-Px^2}{6EI}(\frac{3}{2}L - x) \quad 0 \leq x \leq L/2$ $v = \frac{-PL^2}{24EI}(3x - \frac{1}{2}L) \quad L/2 \leq x \leq L$
	$\theta_{\max} = \frac{-wL^3}{6EI}$	$v_{\max} = \frac{-wL^4}{8EI}$	$v = \frac{-wx^2}{24EI}(x^2 - 4Lx + 6L^2)$
	$\theta_{\max} = \frac{M_0L}{EI}$	$v_{\max} = \frac{M_0L^2}{2EI}$	$v = \frac{M_0x^2}{2EI}$
	$\theta_{\max} = \frac{-wL^3}{48EI}$	$v_{\max} = \frac{-7wL^4}{384EI}$	$v = \frac{-wx^2}{24EI}(x^2 - 2Lx + \frac{3}{2}L^2) \quad 0 \leq x \leq L/2$ $v = \frac{-wL^3}{192EI}(4x - L/2) \quad L/2 \leq x \leq L$
	$\theta_{\max} = \frac{-w_0L^3}{24EI}$	$v_{\max} = \frac{-w_0L^4}{30EI}$	$v = \frac{-w_0x^2}{120EIL}(10L^3 - 10L^2x + 5Lx^2 - x^3)$