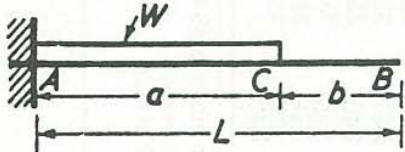
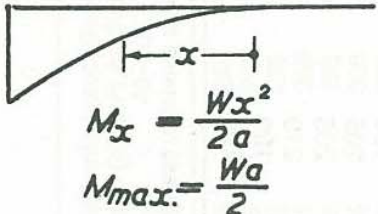
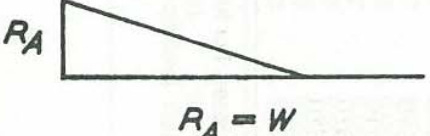
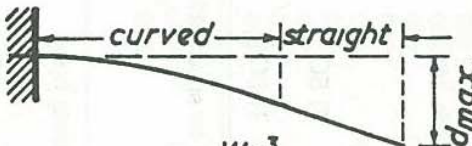
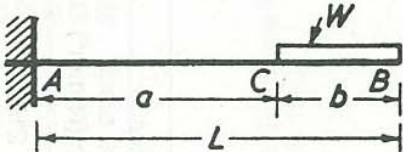
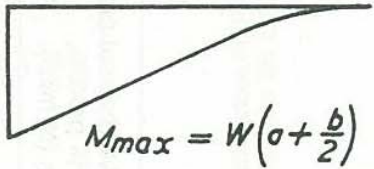
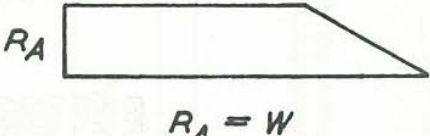

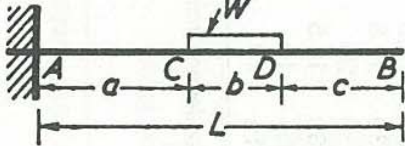
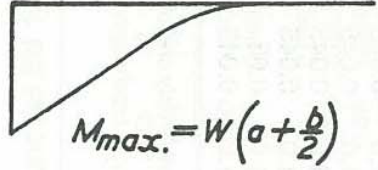
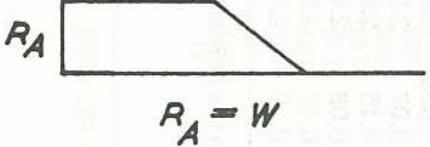
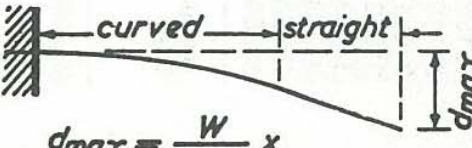
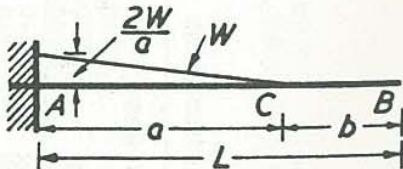
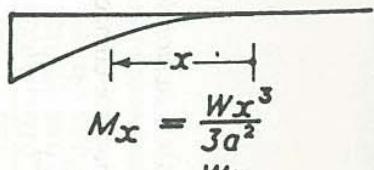
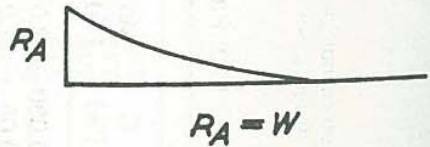
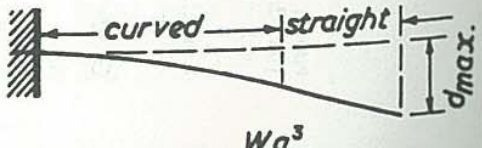
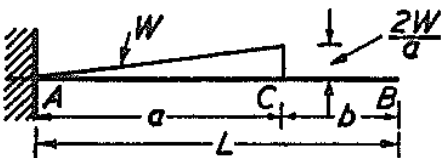
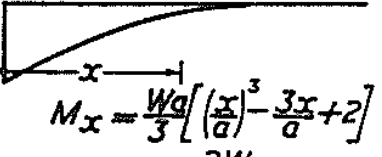
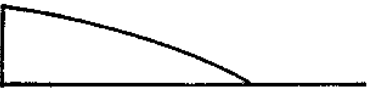
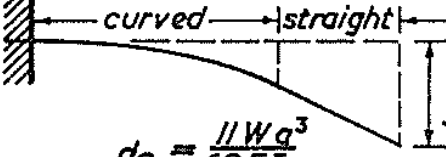
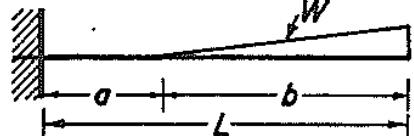
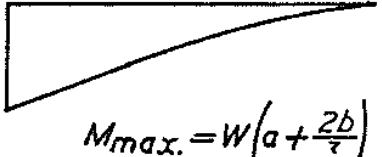
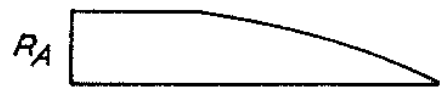
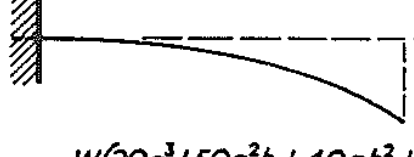
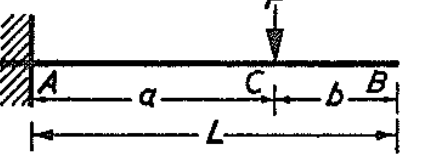
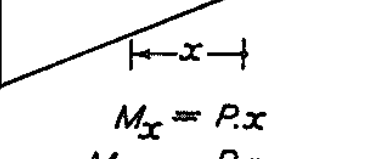

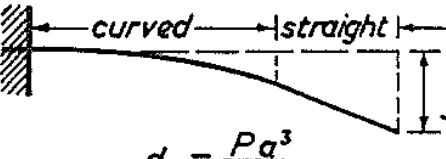
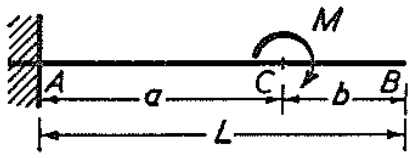
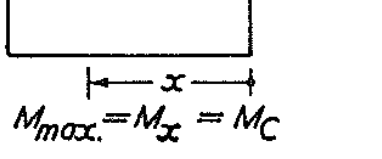
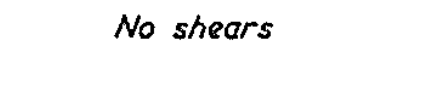
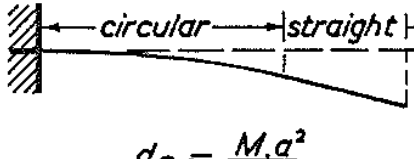


CANTILEVERS				
LOADING	MOMENT	SHEAR	DEFLECTION	
	 $M_x = \frac{Wx^2}{2a}$ $M_{max.} = \frac{Wa}{2}$	 $R_A = W$	 $d_C = \frac{Wa^3}{8EI}$ $d_{max.} = \frac{Wa^3}{8EI} \left(1 + \frac{4b}{3a}\right)$	
	 $M_{max} = W\left(a + \frac{b}{2}\right)$	 $R_A = W$	 $d_{max} = \frac{W(8a^3 + 18a^2b + 12ab^2 + 3b^3)}{24EI}$	
LOADING	MOMENT	SHEAR	DEFLECTION	
	 $M_{max.} = W\left(a + \frac{b}{2}\right)$	 $R_A = W$	 $d_{max.} = \frac{W}{24EI} x$ $(8a^3 + 18a^2b + 12ab^2 + 3b^3 + 12a^2c + 12abc + 4b^2c)$	
	 $M_x = \frac{Wx^3}{3a^2}$ $M_A = \frac{Wa}{3}$	 $R_A = W$	 $d_C = \frac{Wa^3}{15EI}$ $d_{max.} = \frac{Wa^3}{15EI} \left(1 + \frac{5b}{4a}\right)$	

CANTILEVERS				
LOADING	MOMENT	SHEAR	DEFLECTION	
	 $M_x = \frac{W a}{3} \left[\left(\frac{x}{a} \right)^3 - \frac{3x}{a} + 2 \right]$ $M_A = \frac{2W a}{3}$	 $R_A = W$	 $d_C = \frac{11W a^3}{60EI}$ $d_{max.} = \frac{11W a^3}{60EI} \left(1 + \frac{15b}{11a} \right)$	
	 $M_{max.} = W \left(a + \frac{2b}{3} \right)$	 $R_A = W$	 $d_{max.} = \frac{W(20a^3 + 50a^2b + 40ab^2 + 11b^3)}{60EI}$	
LOADING	MOMENT	SHEAR	DEFLECTION	
	 $M_x = P.x$ $M_{max} = P.a$	 $R_A = P$	 $d_C = \frac{P a^3}{3EI}$ $d_{max.} = \frac{P a^3}{3EI} \left(1 + \frac{3b}{2a} \right)$	
	 $M_{max.} = M_x = M_C$	 <p>No shears</p>	 $d_C = \frac{M.a^2}{2EI}$ $d_{max.} = \frac{M.a^2}{2EI} \left(1 + \frac{2b}{a} \right)$	<p>N.B. For anti-clockwise moments the deflection is upwards.</p>