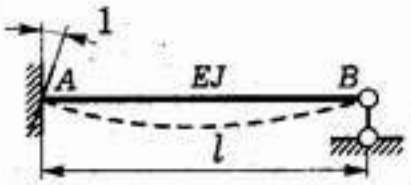
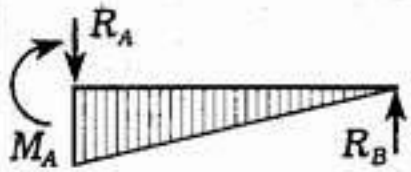
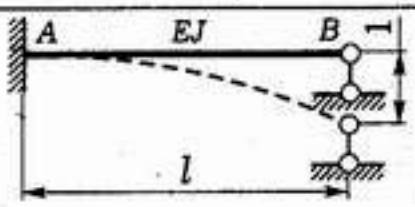
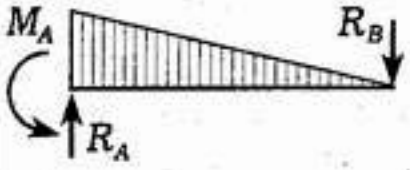
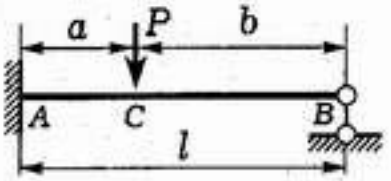
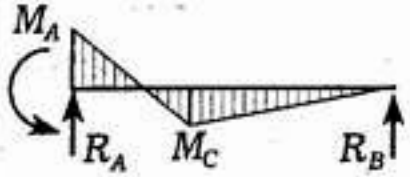
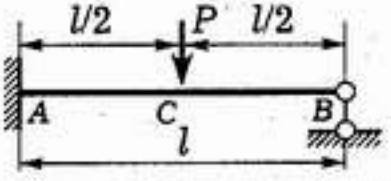
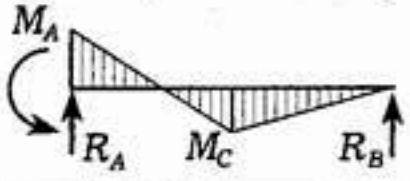
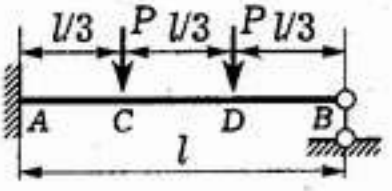
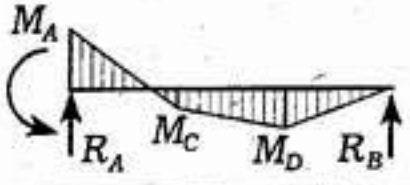
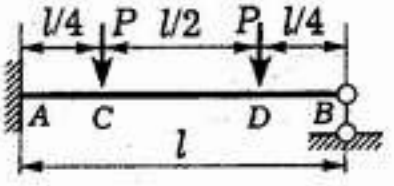
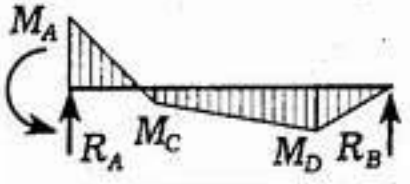
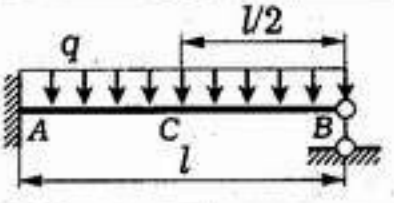
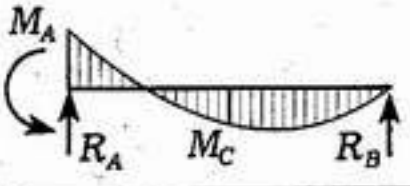
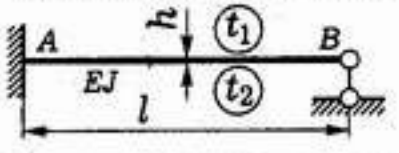
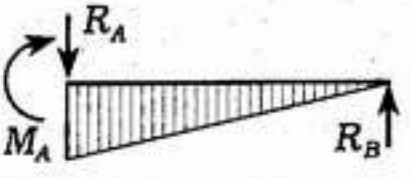
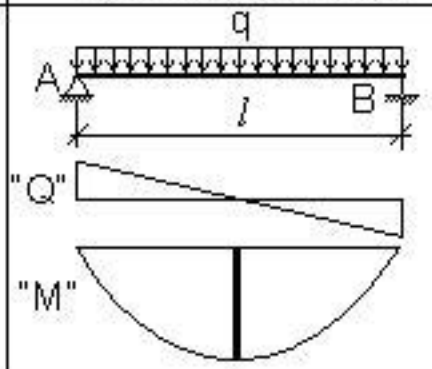
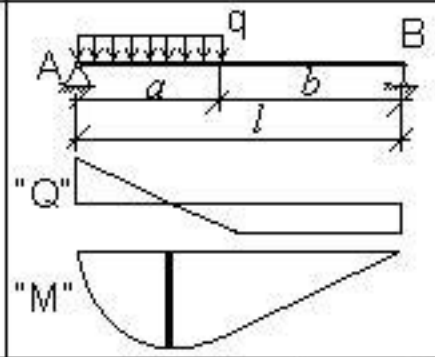
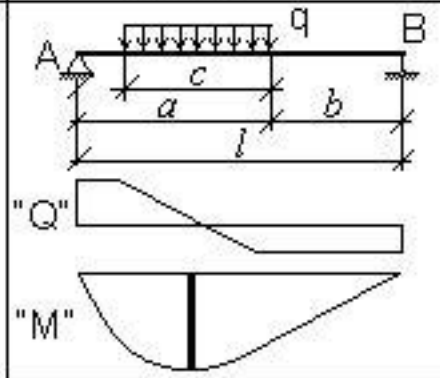
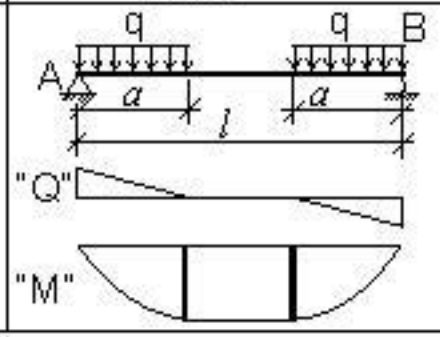
1			$R_A = R_B = \frac{3EJ}{l^2}$; $M_A = \frac{3EJ}{l}$
2			$R_A = R_B = \frac{3EJ}{l^3}$; $M_A = \frac{3EJ}{l^2}$
3			$R_A = \frac{Pb}{2l^3}(3l^2 - b^2)$; $R_B = \frac{Pa^2}{2l^3}(3l - a)$; $M_A = \frac{Pb}{2l^2}(l^2 - b^2)$; $M_C = \frac{Pa^2b}{2l^3}(3l - a)$
4			$R_A = \frac{11}{16}P$; $R_B = \frac{5}{16}P$; $M_A = \frac{3}{16}Pl$; $M_C = \frac{5}{32}Pl$
5			$R_A = \frac{4}{3}P$; $R_B = \frac{2}{3}P$; $M_A = \frac{1}{3}Pl$; $M_C = \frac{1}{9}Pl$; $M_D = \frac{2}{9}Pl$
6			$R_A = \frac{41}{32}P$; $R_B = \frac{23}{32}P$; $M_A = \frac{9}{32}Pl$; $M_C = \frac{5}{128}Pl$; $M_D = \frac{23}{128}Pl$
7			$R_A = \frac{5}{8}ql$; $R_B = \frac{3}{8}ql$; $M_A = \frac{1}{8}ql^2$; $M_C = \frac{1}{16}ql^2$
8	Неравномерный нагрев 		$R_A = R_B = \frac{3EJ\alpha\Delta t}{2hl}$; $M_A = \frac{3EJ\alpha\Delta t}{2h}$; $\Delta t = t_1 - t_2$ $(t_1 > t_2)$

№	Расчетная схема, нагрузки и эпюры	Опорные реакции	Изгибающий момент	Прогиб балки	Угол поворота на опорах
2.1		$A = B = \frac{q\,l}{2}$	$M = \frac{q\,x\,(l - x)}{2}$ $M_{max} = \frac{q\,l^2}{8}$	$f = \frac{q(2lx^3 - x^4 - l^3x)}{24\,EI}$ $f_{max} = -\frac{5\,q\,l^4}{384\,EI}$	$\Theta_A = \Theta_B = \frac{q\,l^3}{24\,EI}$
2.2		$A = \frac{q\,a}{l}(\frac{a}{2} + b)$ $B = \frac{q\,a^2}{2\,l}$	$M_{max} = \frac{q\,a^2}{8}(2 - \frac{a}{l})^2$	при $x = a$ $f = \frac{Q\,a^3 b}{24\,EI}(3\frac{a}{l} - 4)$ при $a > 0.547\,l$ f_{max} - на левой стороне	$\Theta_A = \frac{q\,a^2 l}{6\,EI}(1 - \frac{a}{2l})^2$ $\Theta_B = \frac{q\,a^2 l}{12EI}(1 - \frac{a^2}{2l^2})$
2.3		$A = \frac{qc}{l}(\frac{c}{2} + b)$ $B = \frac{qc}{l}(a - \frac{c}{2})$	$M = A\,x$ $(0 < x < a)$ $M = A\,x - q\frac{(x - a)^2}{2}$ $(a - c < x < a)$	при $x = a$ $-f = \frac{Q\,a}{6\,EI}[\frac{ab}{l}(2al -$ $- 2a^2 - \frac{c^2}{4}) + \frac{c^3}{64}]$	$\Theta_A = \frac{q\,bc}{24l\,EI}[4a\,(l +$ $+ b) - c^2]$ $\Theta_B = \frac{q\,ac}{24l\,EI}[4b\,(l +$ $+ a) - c^2]$
2.4		$A = B = q\,a$	$M = q\,x\,(a - \frac{x}{2})$ $(0 < x < a)$ $M_{max} = q\,\frac{a^2}{2}$ $(a < x < l - a)$	при $x = 0.5\,l$ $f_{max} = \frac{q\,l^2 a^2}{48\,EI}(2\frac{a^2}{l^2} - 3)$	$\Theta_A = \Theta_B = \frac{q\,a^2}{12\,EI}(3l - 2a)$

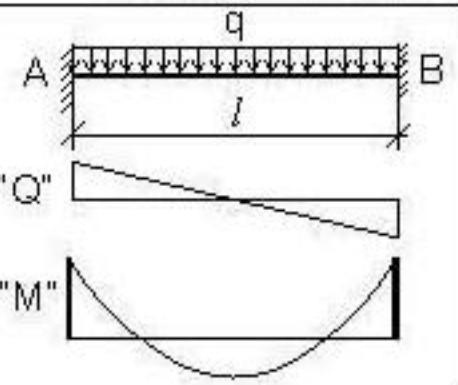
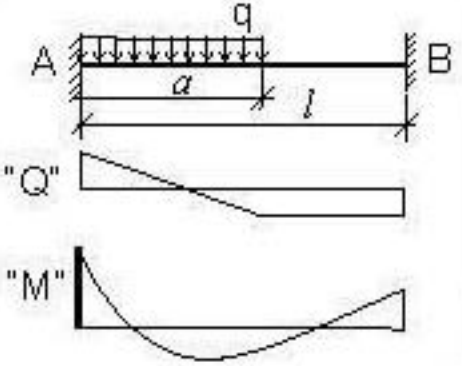
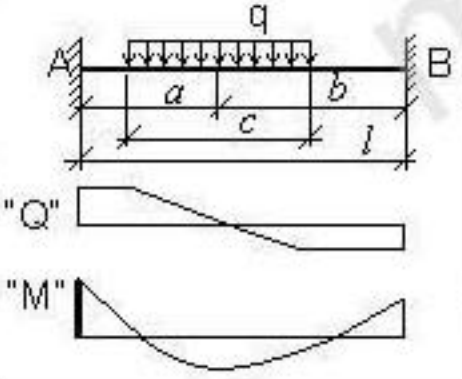
№	Расчетная схема, нагрузки и эпюры	Опорные реакции	Момент на опорах	Момент в пролете	Прогиб балки
2.1		$A = B = \frac{q\,l}{2}$	$-M_A =$ $-M_B = \frac{q\,l^2}{12}$	$M_x = \frac{q\,x\,(l-x)}{2} - \frac{q\,l^2}{12}$ $M_{max} = \frac{q\,l^2}{24}$	$f = \frac{A\,x^3}{6\,EI} + \frac{M_A\,x^2}{2\,EI} - \frac{q\,x^4}{24\,EI}$ $f_{max} = -\frac{q\,l^4}{384\,EI}$
2.2		$A = \frac{q\,a\,(l-0.5a)}{l} - \frac{M_A - M_B}{l}$ $B = \frac{qa^2}{2l} + \frac{M_A - M_B}{l}$	$M_A = -\frac{q\,a^2}{6}(3 - 4\frac{a}{l} + 1.5\frac{a^2}{l^2})$ $M_B = -\frac{q\,a^2}{6}(\frac{a}{l} - 0.75\frac{a^2}{l^2})$	$M_x = A\,x - \frac{q\,x^2}{2} + M_A$ $(0<x<a)$	$f = \frac{A\,x^3}{6\,EI} + \frac{M_A\,x^2}{2\,EI} - \frac{q\,x^4}{24\,EI}$ $(0<x<a)$
2.3		$A = \frac{qcb}{l} - \frac{M_A - M_B}{l}$ $B = \frac{qca}{l} + \frac{M_A - M_B}{l}$	$M_A = -\frac{qc}{l^2}[ab^2 - \frac{c^2}{12}(2b-a)]$ $M_B = -\frac{qc}{l^2}[a^2b - \frac{c^2}{12}(2a-b)]$	$M_x = A\,x + M_A - \frac{q\,(x-a+0.5c)^2}{2}$ $(a-0.5c<x<a+0.5c)$	$f = \frac{A\,x^3}{6\,EI} + \frac{M_A\,x^2}{2\,EI} - \frac{q\,(x-a+0.5c)^4}{24\,EI}$ $(a-0.5c<x<a+0.5c)$

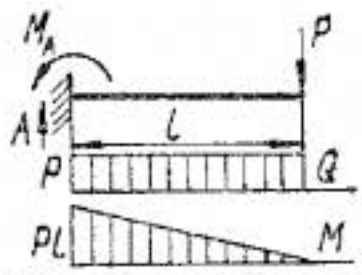
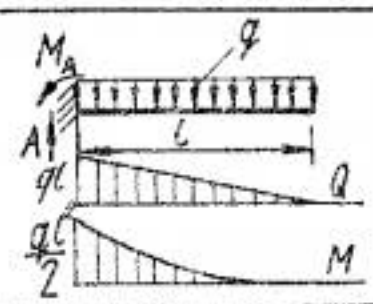
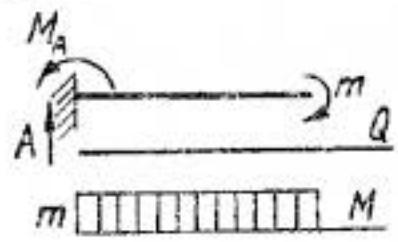
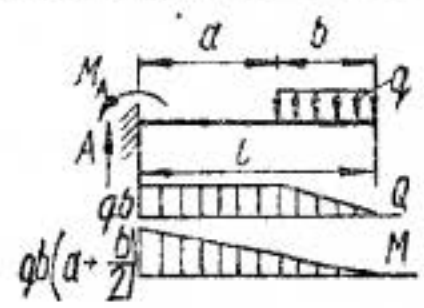
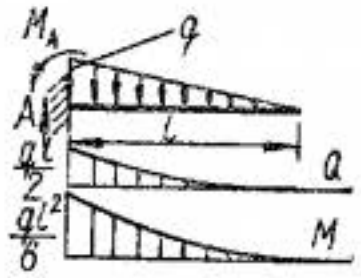
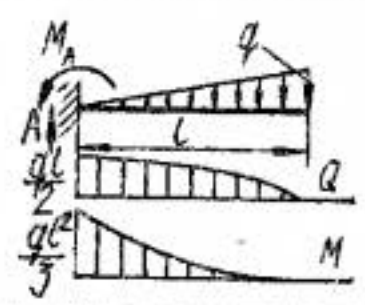
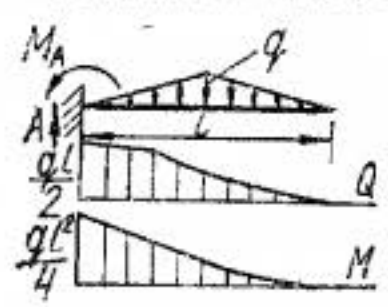
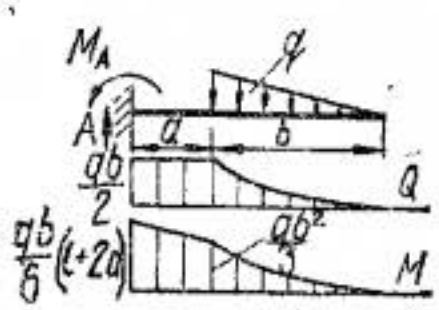
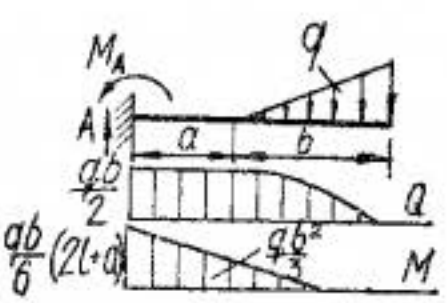
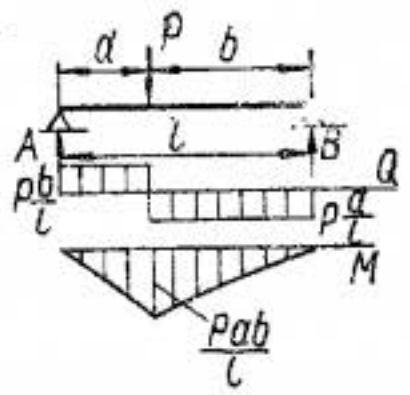
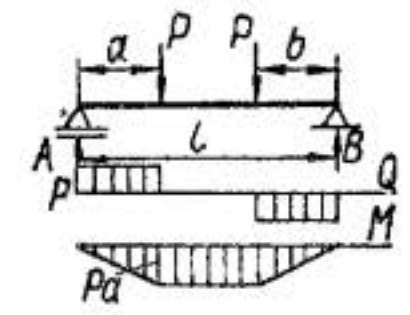
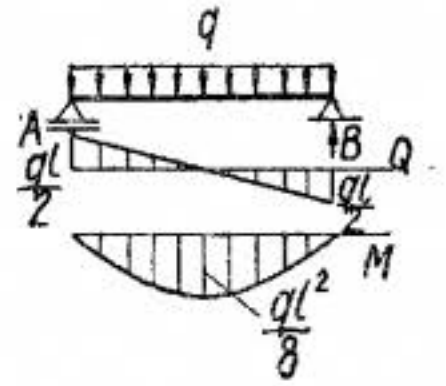
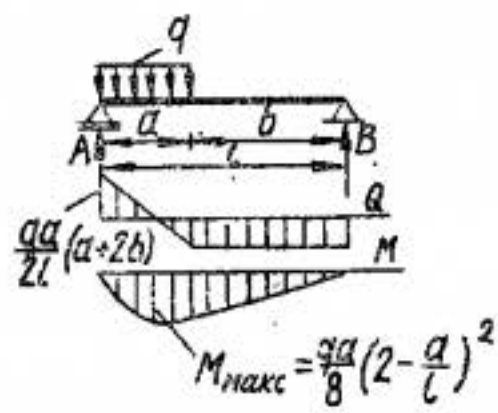
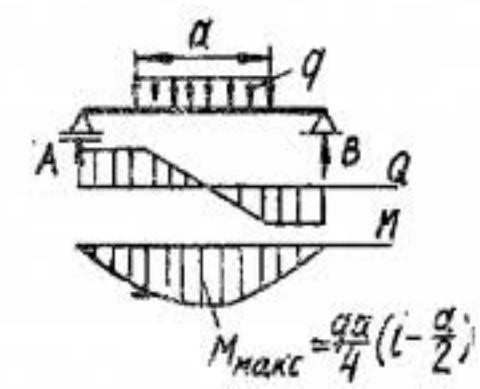
Схема балки, эпюры M и Q	Опорные реакции
	$A = P$ $M_A = Pl$
	$A = ql$ $M_A = \frac{ql^2}{2}$
	$A = 0$ $M_A = m$
	$A = qb$ $M_A = qb \times$ $\times \left(a + \frac{b}{2}\right)$
	$A = \frac{ql}{2}$ $M_A = \frac{ql^2}{6}$
	$A = \frac{ql}{2}$ $M_A = \frac{ql^2}{3}$
	$A = \frac{ql}{2}$ $M_A = \frac{ql^2}{4}$
	$A = \frac{qb}{2}$ $M_A = \frac{qb}{6} \times$ $\times (l + 2a)$

Схема балки, эпюры M и Q	Опорные реакции
	$A = \frac{qb}{2}$ $M_A = \frac{qb}{6} \times$ $\times (2l + a)$
	$A = \frac{Pb}{l}$ $B = \frac{Pa}{l}$ $M_{\text{макс}} =$ $= \frac{Pab}{l}$
	$A = B = P$ $M_{\text{макс}} = Pa$
	$A = B =$ $= \frac{ql}{2}$ $M_{\text{макс}} =$ $= \frac{ql^2}{8}$
	$A = \frac{qa}{l} \times$ $\times \left(\frac{a}{2} + b\right)$ $B = \frac{qa^2}{2l}$
	$A = B = \frac{qa}{2}$

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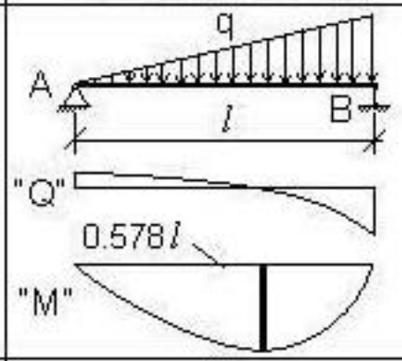
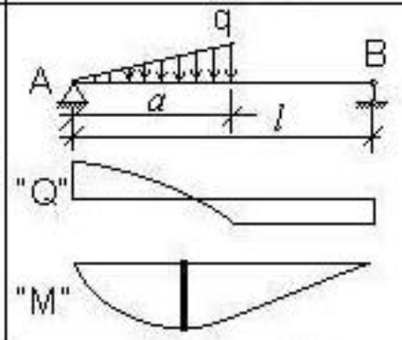
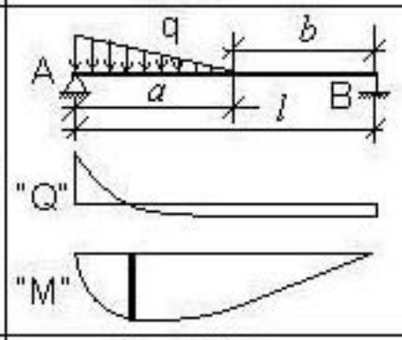
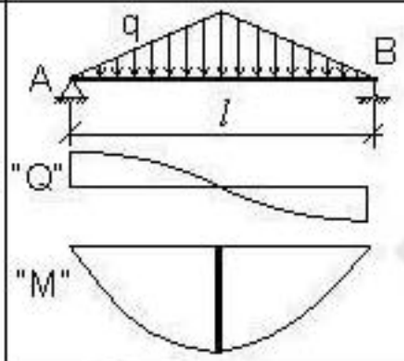
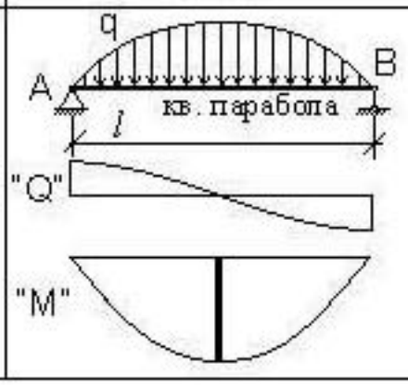
2.5		$A = \frac{q\,l}{6}$ $B = \frac{q\,l}{3}$	$M = \frac{q\,l\,x}{6} - \frac{q\,x^3}{6\,l}$ $M_{l/2} = \frac{q\,l^2}{16}$ $M_{max} = 0.0642\,q\,l^2$	$f_{max} = -0.00651\,\frac{q\,l^4}{EI}$ $при\ x = 0.519\,l$	$\Theta_A = \frac{7\,q\,l^3}{360EI}$ $\Theta_B = \frac{8\,q\,l^3}{360EI}$
2.6		$A = \frac{q\,a}{2\,l}(l - \frac{2a}{3})$ $B = \frac{q\,a^2}{3\,l}$	$M = A\,x - q\frac{x^2}{3}$ $(0 < x < a)$	$при\ x = a$ $-f = \frac{q\,a^3 l}{45EI}(5 - 9\frac{a}{l} + \frac{a^2}{l^2})$	$\Theta_A = \frac{q\,a^2 l}{360EI}(12\frac{a^2}{l^2} - 45\frac{a}{l} + 40)$ $\Theta_B = \frac{q\,a^2 l}{90EI}(5 - 3\frac{a^2}{l^2})$
2.7		$A = \frac{qa}{2l}(l - \frac{a}{3})$ $B = \frac{qa^2}{6l}$	$при\ x = a$ $M = A\,a - q\frac{a^2}{6}$	$при\ x = a$ $-f = \frac{q\,a^2 bl}{360EI}(20\frac{a}{l} - 13\frac{a^2}{l^2})$	$\Theta_A = \frac{q\,a^2 l}{360EI}(3\frac{a^2}{l^2} - 15\frac{a}{l} + 20)$ $\Theta_B = \frac{q\,al^2}{360EI}(10 - 3\frac{a^2}{l^2})$
2.8		$A = B = \frac{q\,l}{4}$	$M = \frac{q\,l\,x}{4} - \frac{q\,x^3}{6\,l}$ $(0 < x < \frac{l}{2})$ $M_{max} = \frac{q\,l^2}{12}$	$f_{max} = -\frac{q\,l^4}{120EI}$	$\Theta_A = \Theta_B = \frac{5\,q\,l^3}{192EI}$
2.9		$A = B = \frac{q\,l}{3}$	$q_x = \frac{4\,q\,x}{l^2}(l - x)$ $(0 < x < \frac{l}{2})$ $M_{max} = \frac{10\,q\,l^2}{96}$	$f_{max} = -\frac{61\,q\,l^4}{5760EI}$	$\Theta_A = \Theta_B = \frac{q\,l^3}{30\,EI}$