



I $0 \leq x \leq l$

$$M_I = -M_A + R_A x$$

$$M_I(0) = \frac{1}{2}ql^2 + ql \cdot 0 = \frac{1}{2}ql^2$$

$$M_I(l) = \frac{1}{2}ql^2 + ql^2 = \frac{3}{2}ql^2$$

$$T_I = R_A$$

$$T_I = ql$$

II $l \leq x \leq 2l$

$$M_{II} = -M_A + R_A x - M_0$$

$$M_{II}(l) = \frac{1}{2}ql^2 + ql^2 - 2ql^2 = -\frac{1}{2}ql^2$$

$$M_{II}(2l) = \frac{1}{2}ql^2 + 2ql^2 - 2ql^2 = \frac{1}{2}ql^2$$

$$T_{II} = R_A$$

$$T_{II} = ql$$

III $2l \leq x \leq 3l$

OD PRAWEJ STRONY

$$M_{III} = -q(3l-x) \frac{(3l-x)}{2} = -q \frac{(3l-x)^2}{2}$$

$$M_{III}(2l) = -q \frac{l^2}{2} = -\frac{ql^2}{2} = -\frac{1}{2}ql^2$$

$$M_{III}(3l) = 0$$

$$T_{III} = q(3l-x)$$

$$T_{III}(2l) = ql$$

$$\sum P_{iz} = 0 \Rightarrow -R_A + q \cdot l = 0$$

$$R_A = ql$$

$$\sum M_{iA} = 0 \Rightarrow M_A - M_0 + ql \left(\frac{5l}{2} \right) = 0$$

$$M_A = M_0 - \frac{5}{2}ql^2$$

$$M_A = 2ql^2 - \frac{5}{2}ql^2$$

$$M_A = -\frac{1}{2}ql^2$$