$\Sigma X = 0$:

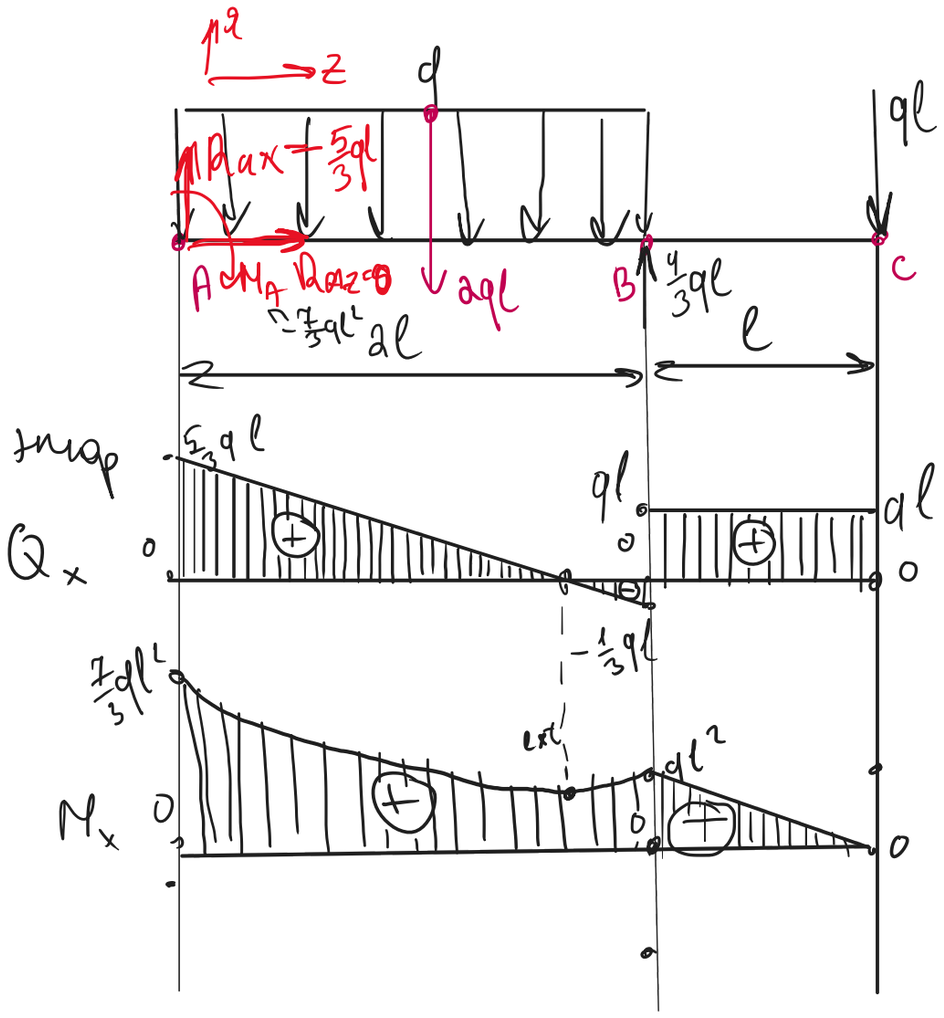
$$R_{A(x)} - 2ql + \frac{4}{3}ql - ql = 0$$

$\Sigma M_{(A)} = 0$:

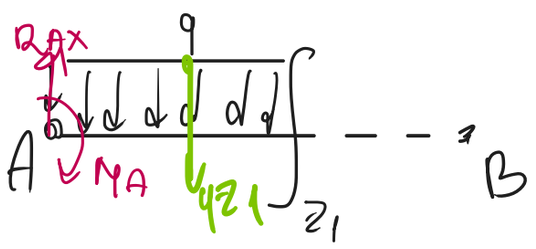
$$-M_A - 2ql^2 + \frac{4}{3}ql \cdot 2l - ql \cdot 3l = 0$$

$$R_{A(x)} = 3ql - \frac{4}{3}ql = \frac{5}{3}ql$$

$$M_A = 2ql^2 + 3ql^2 - \frac{6}{3}ql^2 = -\frac{7}{3}ql^2$$



AB



$z_1(0; 2l)$

$$Q_x^{AB} = R_{Ax} - qz_1 = \frac{5}{3}ql - qz_1$$

$$Q^{AB}(0) = \frac{5}{3}ql \qquad Q^{AB}_{(2l)} = \frac{5}{3}ql - 2ql = -\frac{1}{3}ql$$

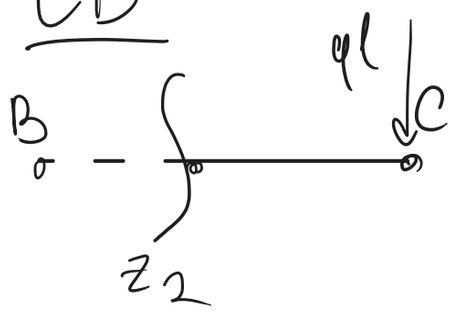
$$M^{AB}_{z_1} = -M_A - R_{Ax} \cdot z_1 + qz_1 \cdot \frac{z_1}{2} = \frac{7}{3}ql^2 -$$

$$-\frac{5}{3}ql \cdot z_1 + q\frac{z_1^2}{2}$$

$$M^{AB}(0) = \frac{7}{3}ql^2$$

$$M^{AB}(2l) = \frac{7}{3}ql^2 - \frac{5}{3}ql^2 \cdot 2 + 2ql^2 = ql^2$$

CB



$z_2(0; l)$

$$Q_x^{CB} = +ql$$

$$M_x^{CB} = ql \cdot z_2 \qquad M^{CB}_{(0)} = 0 \qquad M^{CB}_{(l)} = ql^2$$