

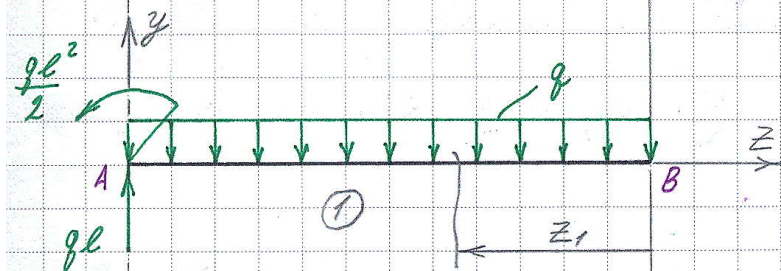
Реакции опор:

$$\sum F_z = 0 = -Z_A \Rightarrow Z_A = 0$$

$$\sum F_y = 0 = Y_A - q \cdot l \Rightarrow Y_A = ql$$

$$\sum M_A = 0 = -M_{RA} - q \cdot l \cdot l/2$$

$$M_{RA} = -\frac{ql^2}{2} < 0 \Rightarrow \text{в отрицательную сторону}$$



Результат:

$$\sum F_{y_1} = 0 = Q_{y_1} - qz_1 \Rightarrow Q_{y_1} = q \cdot z_1$$

$$z_1 = 0: Q_{y_1} = 0$$

$$z_1 = l: Q_{y_1} = ql$$

$$\sum M_{x_1} = 0 = -M_{x_1} - qz_1 \cdot z_1/2$$

$$M_{x_1} = -\frac{qz_1^2}{2}$$

$$z_1 = 0: M_{x_1} = 0$$

$$z_1 = l: M_{x_1} = -\frac{ql^2}{2}$$

