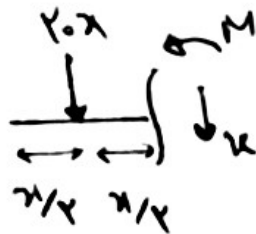
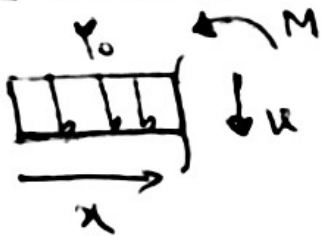


$$y_0 \times 2 = F_0$$

$$\sum F_x = 0 \quad A_x = 0$$

$$\sum F_y = 0 \quad A_y + B_y = F_0 \quad \boxed{A_y = 1.0}$$

$$\sum M_A = 0 \quad B_y(4) + F_0(1) = 0 \quad \boxed{B_y = -1.0}$$



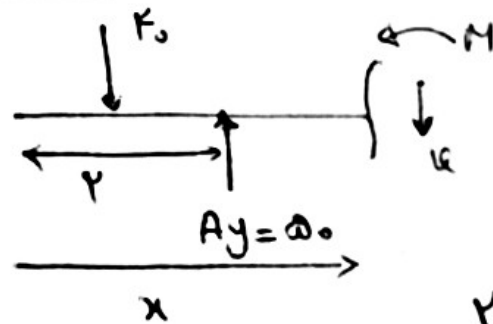
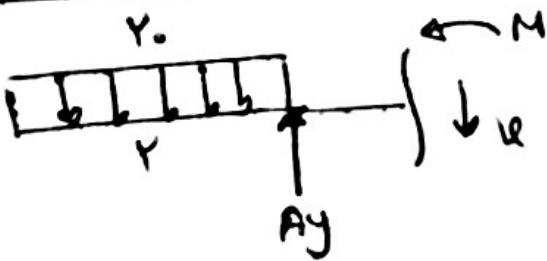
$$-V - y_0 \cdot x = 0$$

$$V = -y_0 \cdot x$$

برش در نقطه

$$0 < x < 2$$

$$M + y_0 \cdot x \left(\frac{x}{2} \right) = 0 \quad M = -1.0 \cdot x^2$$



برش در نقطه

$$2 < x < 4$$

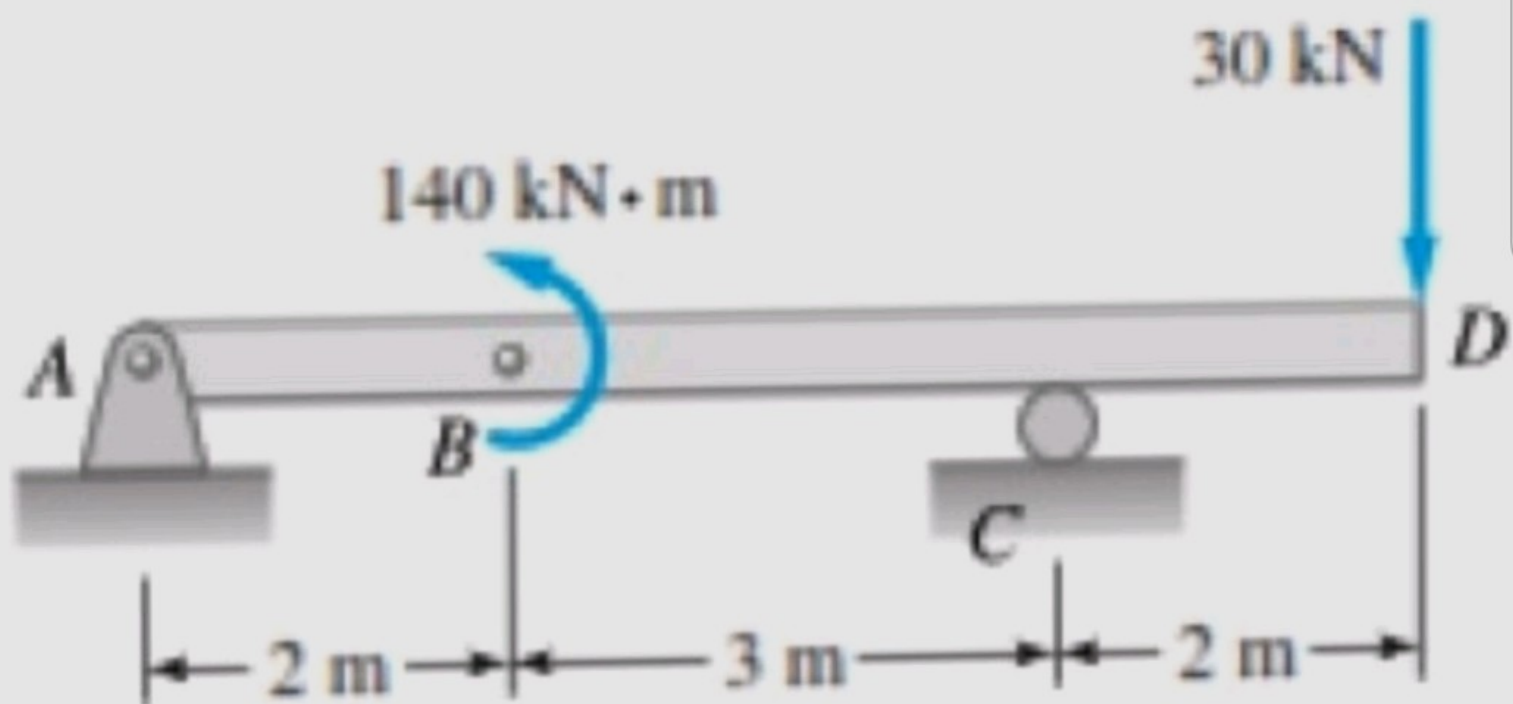
$$-V - F_0 + 1.0 = 0$$

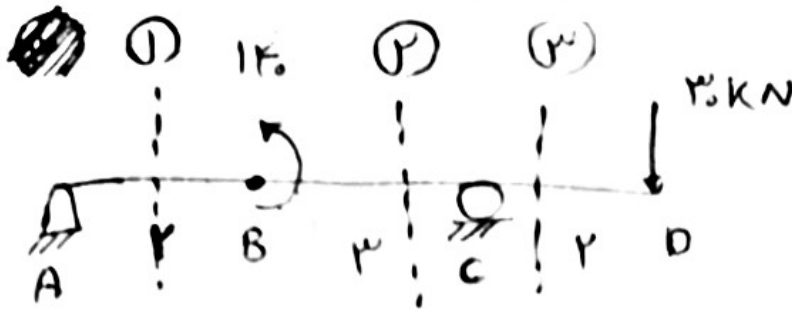
$$-V + 1.0 = 0 \quad \boxed{V = 1.0}$$

$$M + F_0(x-1) - 1.0(x-2) = 0$$

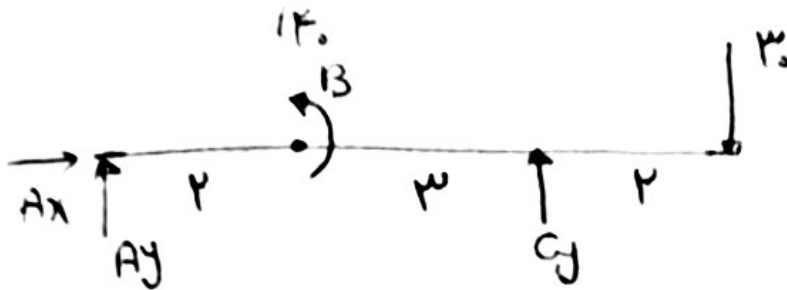
$$M = -F_0(x-1) + 1.0(x-2) = -1.0 \cdot x + 1.0 + 1.0 \cdot x - 2.0 = -1.0$$

$$\boxed{M = 1.0 \cdot x - 1.0}$$





مسئله 12



$$\sum F_x = 0 \quad A_x = 0$$

$$\sum F_y = 0 \quad A_y + C_y = 3$$

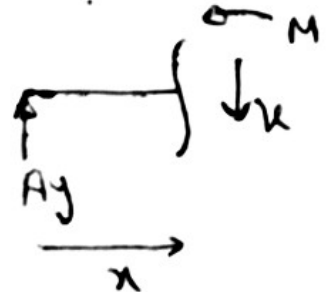
$$\sum M_A = 0 \quad 1k_0 + C_y(l_0) - 3_0(l) = 0$$

$$C_y(l_0) = 3_0 l - 1k_0 = 14 \quad C_y = \frac{14}{l_0} = 1k$$

$$A_y = 3_0 - 1k = 14$$

بخش اول

$$0 < x < l_0$$

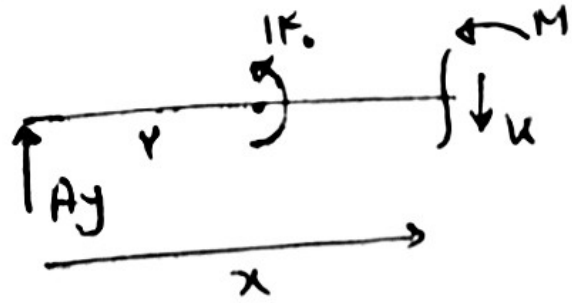


$$V = A_y = 14$$

$$M_1 - 14x = 0 \quad M_1 = 14x$$

بخش دوم

$$l_0 < x < l$$



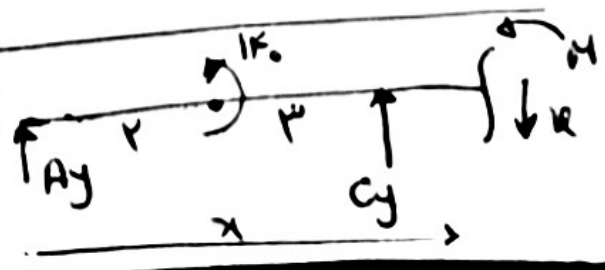
$$A_y = V_y = 14$$

$$M - 14x + 1k_0 = 0 \quad M_y = 14x - 1k_0$$

بخش سوم

$$-V_y + A_y + C_y = 0 \quad V_y = 3_0$$

$$M_y = A_y(x) + 1k_0 - C_y(x - l) = 0$$



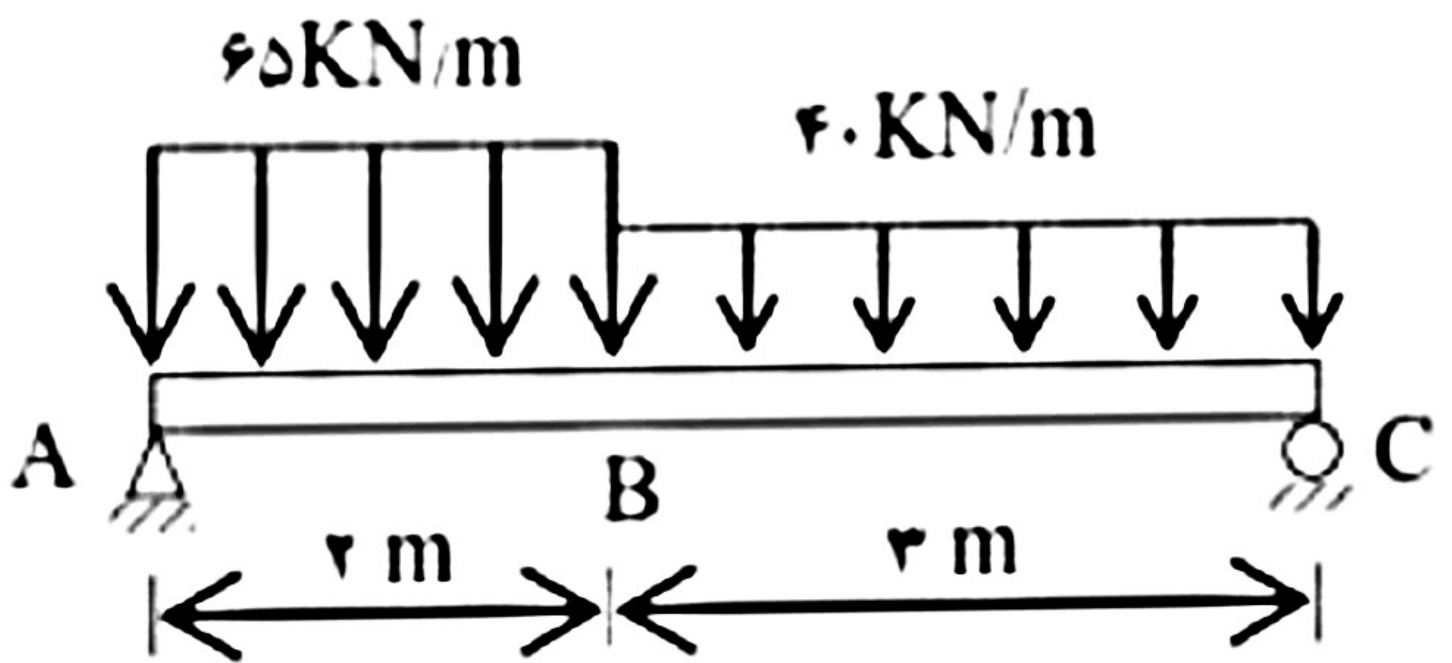
$$M_{\mu} = 14\lambda + 1K(\lambda - \omega) - 1K_0$$

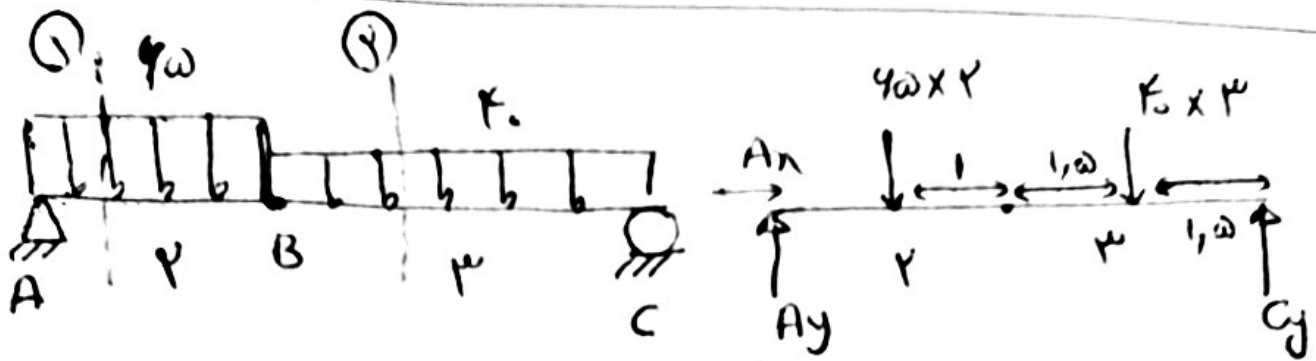
$$\omega < \lambda < V$$

$$M_{\mu} = 14\lambda + 1K\lambda - V_0 - 1K_0$$

$$M_{\mu} = 15\lambda - 21_0$$

بابه سوال ۲





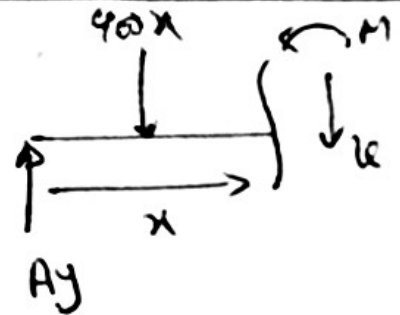
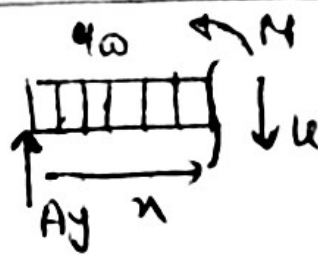
$$\sum F_x = 0 \quad A_x = 0$$

$$A_y + C_y = 4\omega \times 2 + F_0 \times 2 = 2\omega_0$$

$$\sum M_A = 0 \quad -1\omega_0(1) + 1\omega_0(3) + C_y(4) = 0$$

$$\boxed{C_y = 110} \quad \boxed{A_y = 1F_0}$$

در این قسمت $0 < x < 2$

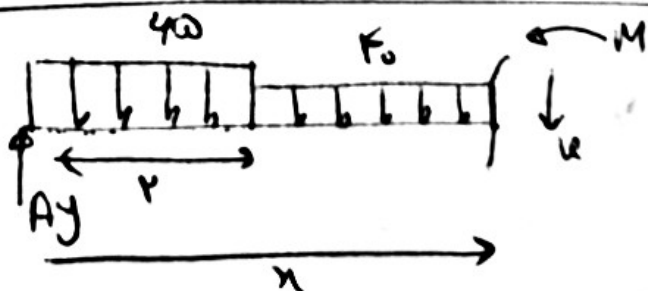


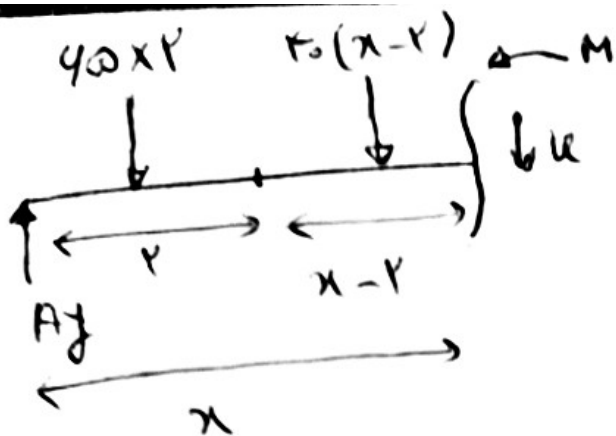
$$-V - 4\omega\lambda + A_y = 0 \quad \boxed{V = -4\omega\lambda + 1F_0}$$

$$M - A_y(\lambda) + 4\omega\lambda \left(\frac{\lambda}{2}\right) = 0$$

$$M = 1F_0\lambda - 4\omega\lambda^2/2$$

در این قسمت $2 < x < 4$





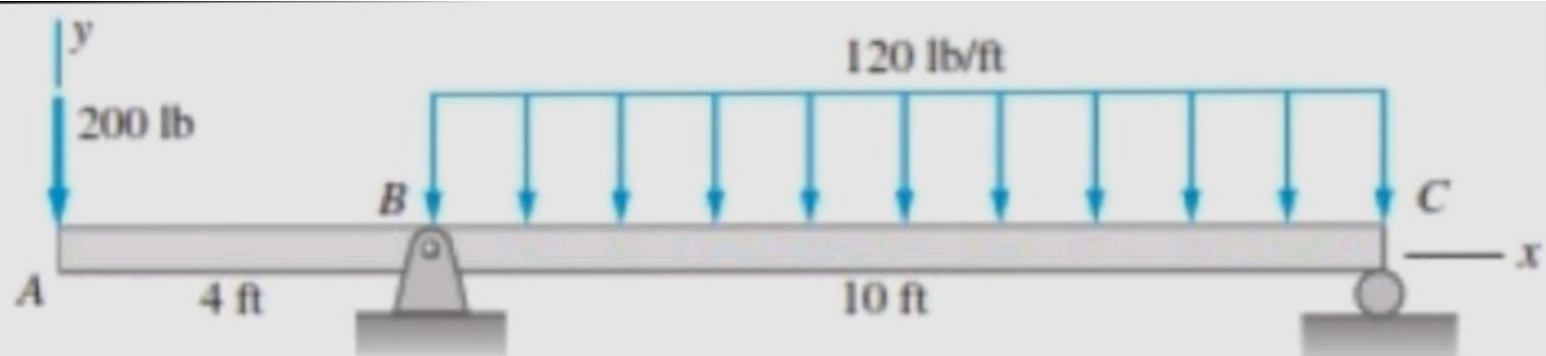
$$-V + 1F_0 - 1F_0 - F_0(x-r) = 0$$

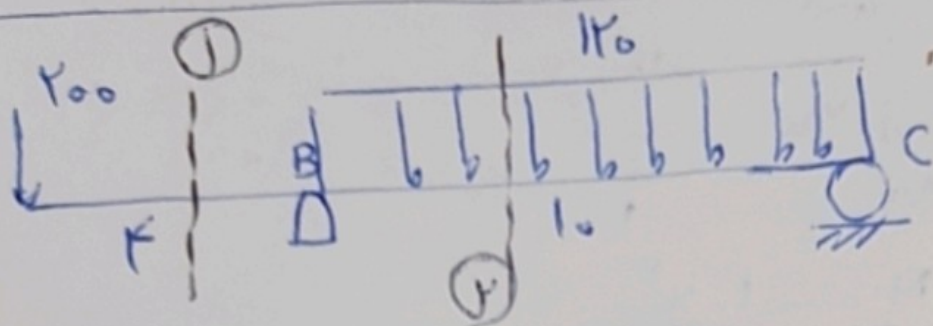
$$\frac{V}{r} = 1_0 - F_0(x-r) = -F_0 x + q_0$$

$$M - 1F_0 x + 1F_0(x-r) + F_0(x-r) \frac{(x-r)}{r} = 0$$

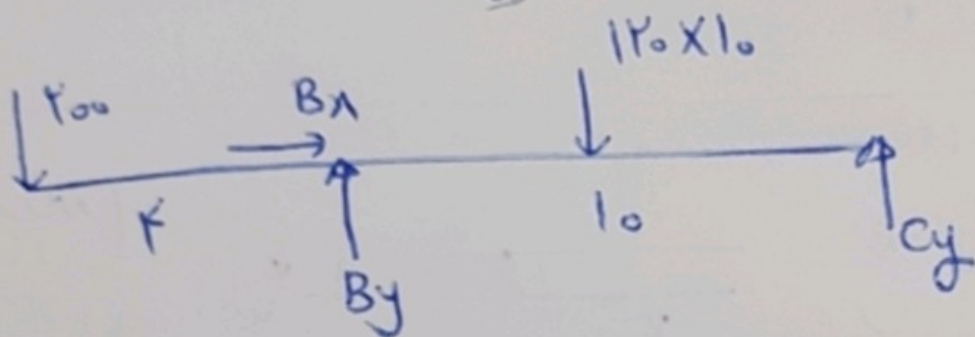
$$M = 1F_0 x - 1F_0(x-r) - F_0(x-r)r$$

$$M_r = \cancel{1F_0 x} + 1F_0 - F_0(x-r)r$$





(K) دالة



$$\Sigma F_x = 0 \quad B_x = 0$$

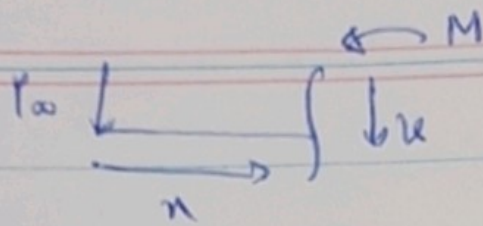
$$\Sigma F_y = 0 \quad B_y + C_y = Y_{00} + (1 \times 0 = 1 \times 0)$$

$$\Sigma M_B = 0 \quad -1 \times 0 (\text{clockwise}) + C_y (l_0) + Y_{00} (F) = 0$$

$$C_y = 2 \times 0$$

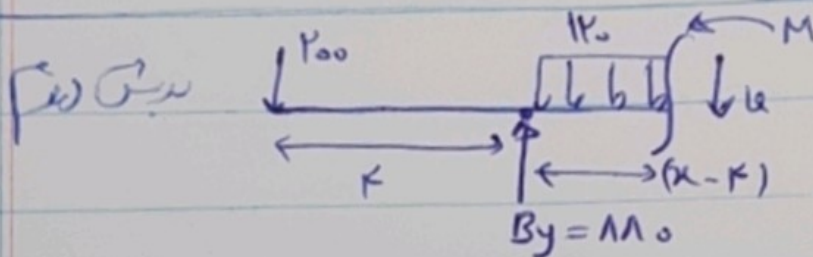
$$B_y = 1 \times 0$$

فصل اول $0 < x < \xi$

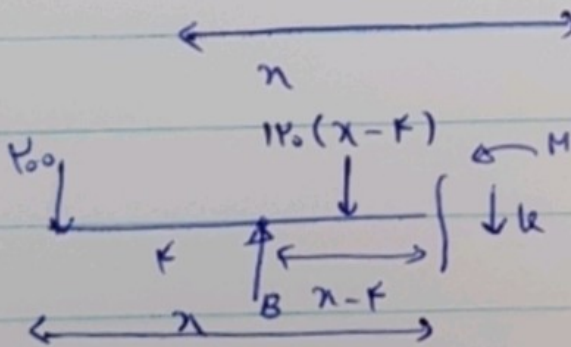


$$-U - P_{00} = 0 \quad \boxed{U = -P_{00}}$$

$$M + P_{00}x = 0 \quad \boxed{M = -P_{00}x}$$



$$K < x < 1K$$



$$-U - P_{00} - q_0(x - \xi) + \Lambda \Lambda_0 = 0$$

$$U = \Lambda \Lambda_0 - P_{00} - q_0(x - \xi) = -P_{00} - q_0 x + \xi q_0 + \Lambda \Lambda_0$$

$$= -q_0 x + \xi q_0 + \Lambda \Lambda_0$$

$$U_{\xi} = -q_0 x + \xi q_0$$

$$M + P_{00}x - \Lambda \Lambda_0(x - \xi) + q_0(x - \xi) \frac{(x - \xi)}{2} = 0$$

$$M = -P_{00}x + \Lambda \Lambda_0(x - \xi) - q_0(x - \xi)^2$$