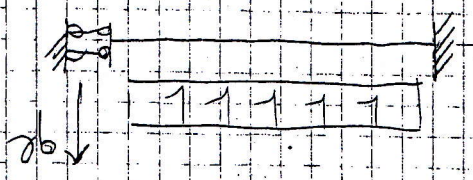


B1



$$\frac{d^4 v}{dx^4} = \frac{qL}{l^4}$$

$$\frac{d^3 v}{dx^3} = \frac{qL}{3l^3} + C_1$$

$$\frac{d^2 v}{dx^2} = \frac{qL}{2l^2} + C_1 x + C_2$$

$$\frac{dv}{dx} = \frac{qL}{6l} + \frac{C_1 x^2}{2} + C_2 x + C_3$$

$$v = \frac{qL}{24l} x^3 + \frac{C_1 x^3}{6} + \frac{C_2 x^2}{2} + C_3 x + C_4$$

$$v = 0$$

$$\frac{dv}{dx} = 0$$

$$\frac{d^2 v}{dx^2} = 0$$

$$\frac{d^3 v}{dx^3} = 0$$

$$\text{For } z = l$$

$$\text{For } z = 2l$$

$$\text{For } z = 3l$$

$$\text{For } z = 4l$$

$$l q = - q L$$

$$q = 0$$

$$q = 0$$

$$q = 0$$

$$q = 0$$

$$f(z) = -\frac{qL}{9z^3} + \frac{qL}{9z^2}$$

$$H(z) = -\frac{qL}{9z^2} + \frac{qL}{9z}$$

$$T(z) = -qz$$

$$C_2 = -\frac{qL}{6EI}$$

$$-qL - C_1 EI = -qL$$

$$-C_1 \frac{qL}{2} - C_2 \frac{qL}{2} = 0$$

$$C_3 = 0$$

$$C_4 = 0$$

$$v = \frac{qL}{24EI} x^3 + \frac{C_1 x^3}{6} + \frac{C_2 x^2}{2} + C_3 x + C_4$$

$$-f(z) = \frac{qL}{6EI} + C_2 + C_3$$

$$-H(z) = \frac{qL}{2EI} + C_1 z + C_2$$

$$-T(z) = -qz = -C_1 z + C_2$$

$$f(z) = \frac{qL}{6EI} + \frac{C_1 z^2}{2} + C_2 z + C_3$$

$$H(z) = \frac{qL}{2EI} + C_1 z + C_2$$

$$T(z) = -qz = -C_1 z + C_2$$

$$\sqrt{B} = -\frac{qL}{12EI} = -26 \text{ cm}$$

$$C_1 = 0$$

