

$$z = l \quad v = 0 \quad \frac{d^2 v}{dz^2} = 0 \Rightarrow \frac{1}{l} (q l^2 z^2 + q l^2 z^4) + c_1 z + c_2 = 0$$

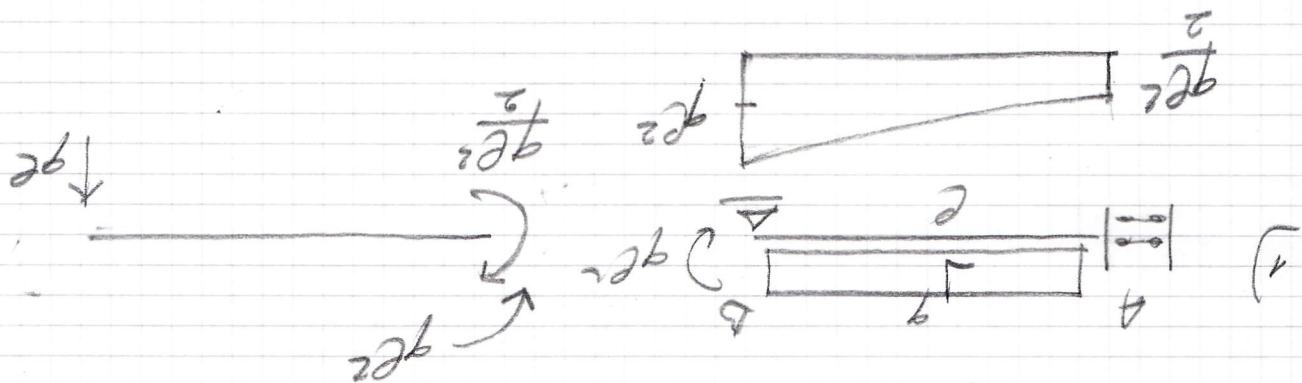
$$z = 0 \quad v = 0 \Rightarrow c_2 = 0$$

$$v(z) = \frac{1}{l} (q l^2 z^2 + q l^2 z^4) + c_1 z + c_2$$

$$\frac{dv}{dz}(z) = \frac{1}{l} (2q l z + 4q l z^3) + c_1$$

$$\frac{d^2 v}{dz^2}(z) = \frac{1}{l} (2q + 12q z^2)$$

$$H(z) = -q l z^2 - \frac{q l^2}{2}$$



$$Flux = 549 \cdot 2,9 - 2000 \cdot 2,9 + 500 \cdot 2,9^2/2 = -2105 \text{ kg w}$$

$$z = \frac{500}{1457} = 2,9 \text{ m}$$

$$T(z) = -1457 + 800z = 0$$

