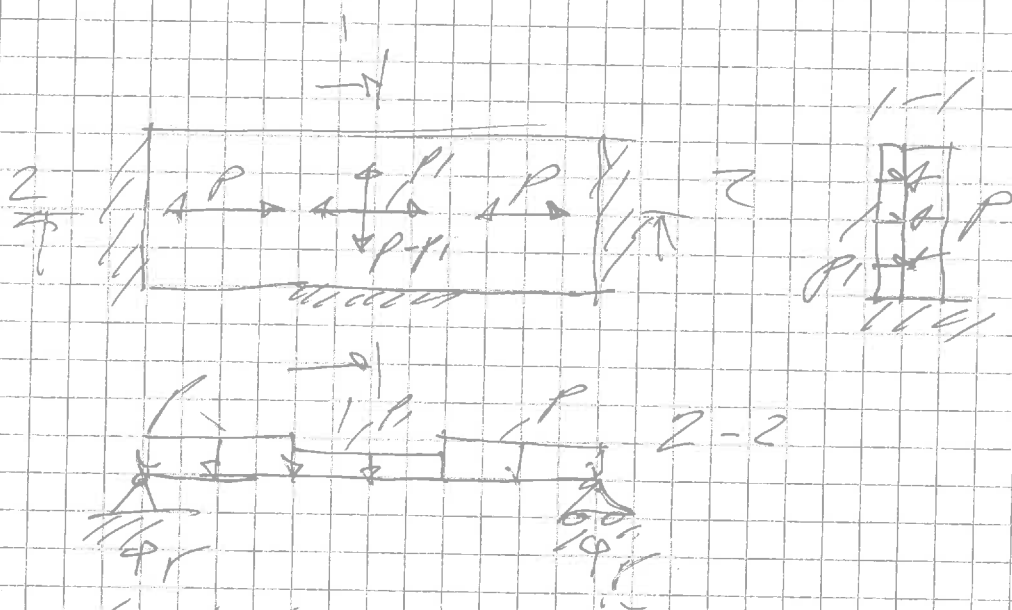


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Sp m1



Schnitt 1-1

$$M_{max} = \frac{1}{2} (p - p_1) a^2 = M_{uy} = M_u$$

Schnitt 2-2

$$r = p a + \frac{1}{2} p_1 a$$

$$M_{max} = r \cdot \frac{3}{2} a - p \cdot a \cdot a - p_1 \cdot \frac{3}{4} a$$

$$= \frac{3}{2} p a^2 + \frac{3}{4} p_1 a^2 - p a^2 - p_1 \frac{a^2}{4}$$

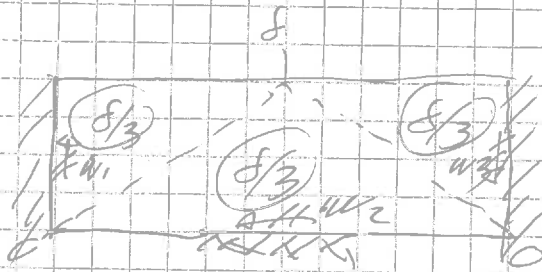
$$= \frac{1}{2} p a^2 + \frac{1}{8} p_1 a^2 = M_{ux} = M_u$$

$$\Rightarrow p_1 = 0 \Rightarrow \underline{\underline{p^{(1)} = 2 M_u / a^2}}$$

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Spm 2



$$A_g = \frac{\delta}{3} \cdot 3a \cdot p = p \delta a^2$$

$$w_1 = \frac{\delta}{3/2 a} = \frac{2}{3} \frac{\delta}{a} = w_3$$

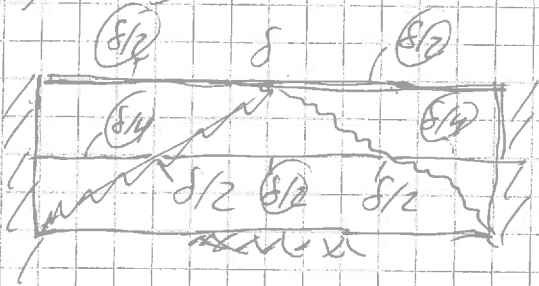
$$w_2 = \delta/a$$

$$\begin{aligned} A_1 &= m_v \cdot a \cdot w_1 + m_c \cdot a \cdot w_2 + m_u \cdot a \cdot w_3 \\ &= m_v \cdot \delta \cdot \left(\frac{2}{3} + 1 + \frac{2}{3} \right) = \underline{\underline{\frac{7}{3} m_v \delta}} \end{aligned}$$

$$p^{(+)} = \underline{\underline{\frac{7}{3} \frac{m_v}{a^2}}}$$

SPM 3

$A_i = \frac{1}{3} m \delta$ som i SPM 2



$$A_g = q \cdot \frac{\delta}{2} \cdot 3q + q \cdot \frac{\delta}{4} \cdot \frac{3}{2}q + q \cdot \frac{\delta}{2} \cdot \frac{3}{2}q$$

$$= \frac{21}{8} q \delta q$$

$$\Rightarrow q^{(4)} = \frac{7 \cdot 8}{3 \cdot 21} m/q = \underline{\underline{\frac{8}{9} \frac{m}{q}}}$$