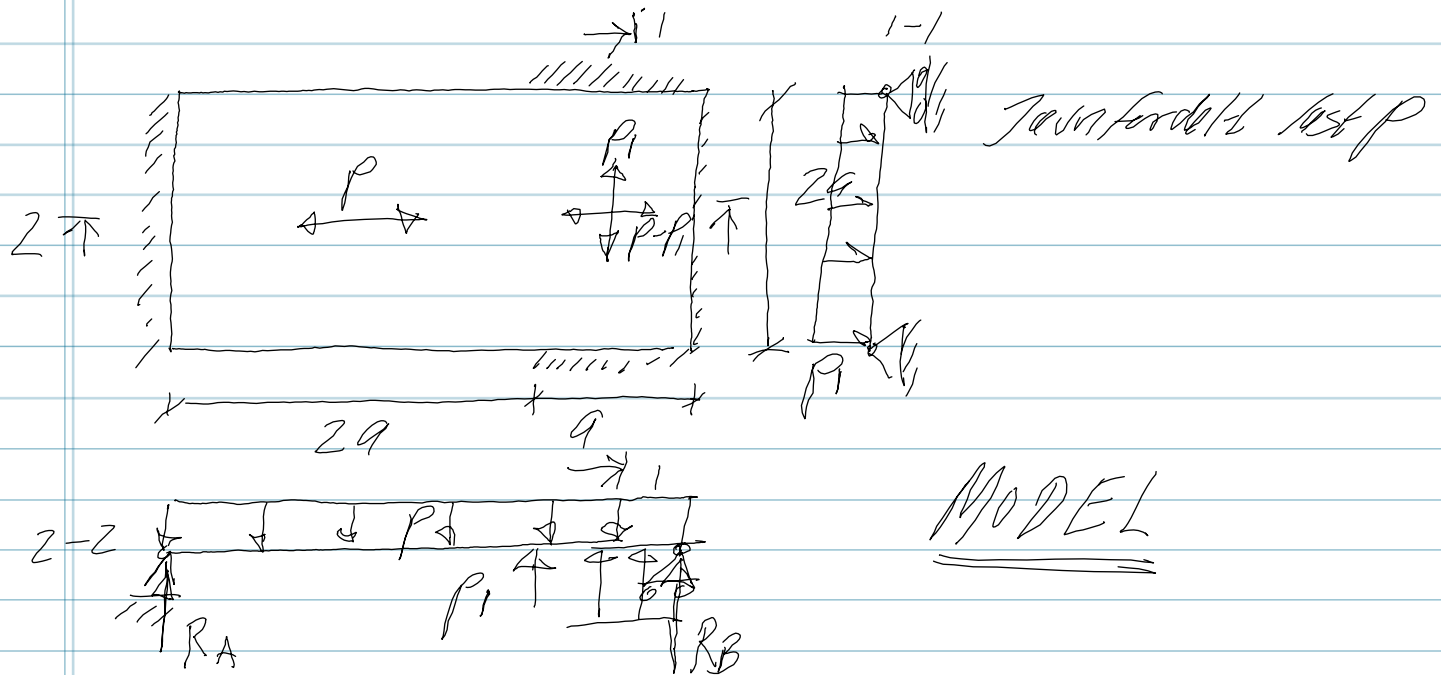


DTU. Betonmonstrumtimmer



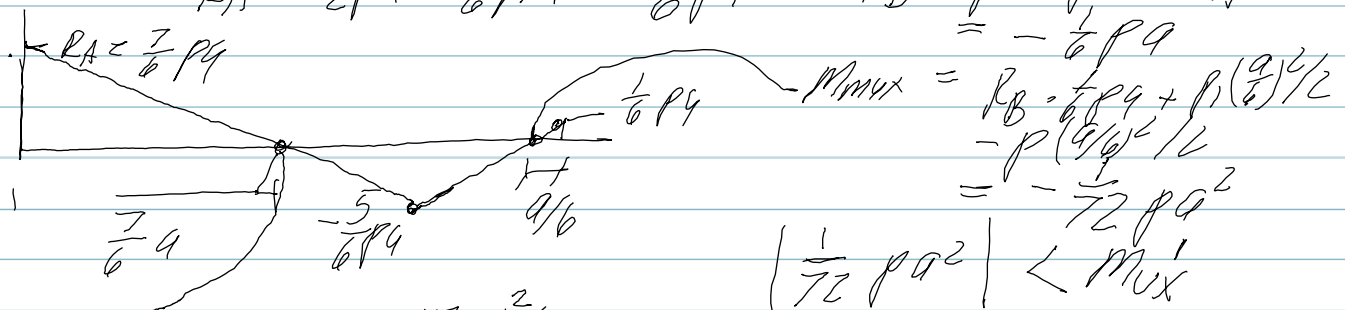
MODEL

Strimmel 2

Valg p_1 , fx $p_1 = 2P$

$$M_B = 0 = R_A \cdot 3a + p_1 \cdot a \cdot \frac{a}{2} - P \cdot 3a \Rightarrow R_A = \frac{3}{2}Pa - \frac{1}{6}p_1a = \frac{7}{6}Pa$$

$$R_B = 3Pa - p_1a - R_A = -\frac{1}{6}p_1a$$



$$M_{max} = R_A \cdot \frac{7}{6}a - p_1(\frac{7}{6}a)^2/2 = \frac{49}{72}p_1a^2 < M_{ux} \Rightarrow p_1^{(-)} = \frac{M_{ux}}{a^2} \cdot \frac{72}{49}$$

Strimmel 1

$$M_{max} = \frac{1}{8}p_1(2a)^2 = p_1a^2 < M_{uy} \Rightarrow p_1^{(-)} = \frac{M_{uy}}{a^2}$$

$$p = \min(p_2^{(-)}, p_2^{(-)}, p_1^{(-)})$$