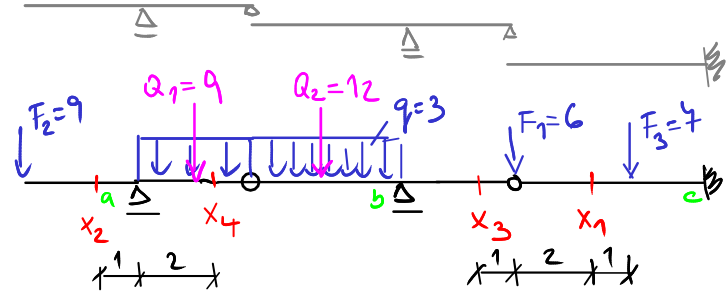
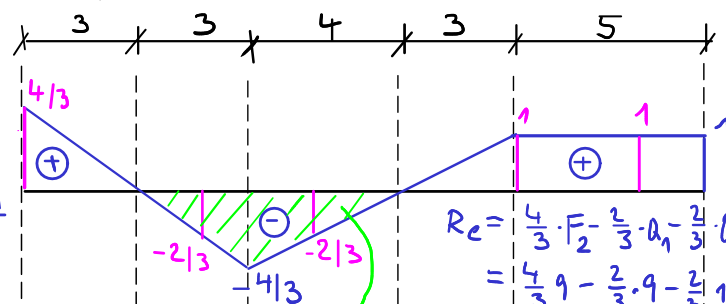


[m, EN, EN/m] JME'NO:

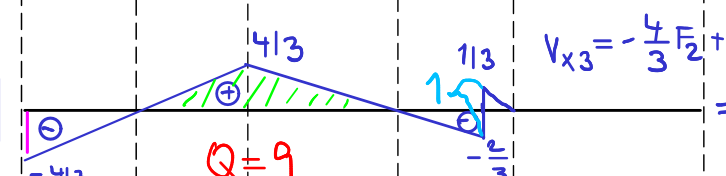


R_c, V_{x3}, M_{x4}

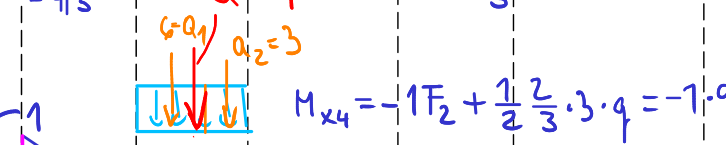


$$R_c = \frac{4}{3} \cdot F_2 - \frac{2}{3} \cdot q_1 \cdot \frac{3}{2} - \frac{2}{3} \cdot Q_2 + 1 \cdot F_1 + 1 \cdot F_3 = \frac{4}{3} \cdot 9 - \frac{2}{3} \cdot 9 \cdot \frac{3}{2} - \frac{2}{3} \cdot 12 + 1 \cdot 6 + 1 \cdot 7 = 17 \text{ EN}$$

$$A \cdot q = 7 \cdot \left(-\frac{4}{3}\right) \cdot \frac{1}{2} \cdot 3 = -14$$



$$V_{x3} = -\frac{4}{3} F_2 + \frac{1}{2} \frac{4}{3} \cdot 7 \cdot q = -\frac{4}{3} \cdot 9 + \frac{1}{2} \frac{4}{3} \cdot 7 \cdot 3 = 2 \text{ EN}$$

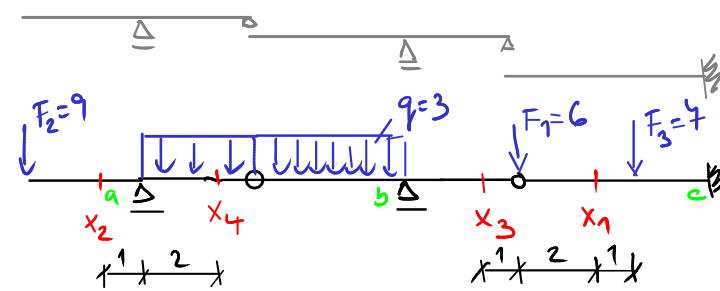


$$M_{x4} = -1 F_2 + \frac{1}{2} \frac{2}{3} \cdot 3 \cdot q = -1 \cdot 9 + \frac{1}{2} \frac{2}{3} \cdot 3 \cdot 3 = -6 \text{ ENm}$$

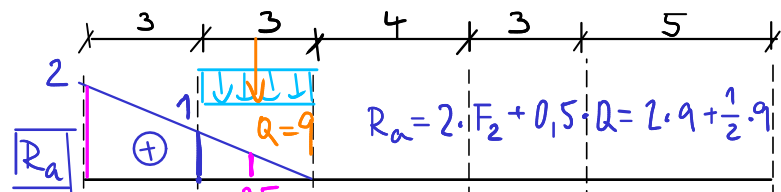
$$\frac{1}{2} \frac{2}{3} \cdot Q_1 + \frac{1}{2} \frac{2}{3} Q_2 = \frac{6}{3} + \frac{3}{3} = 3 \text{ V}$$

! $Q \cdot \frac{1}{3} \cdot 1.5 = 9 \cdot \frac{1}{3} \cdot 1.5 = 4.5 \neq 3$! uelze
PČ není jedna funkce, ale 2 lineární

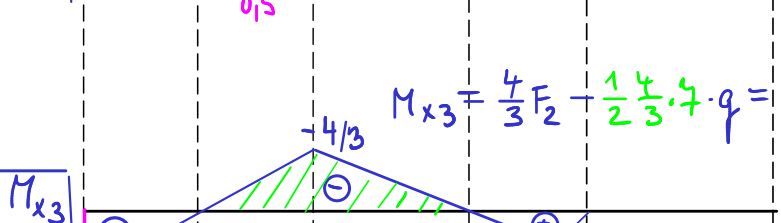
[m, EN, EN/m] JME'NO:



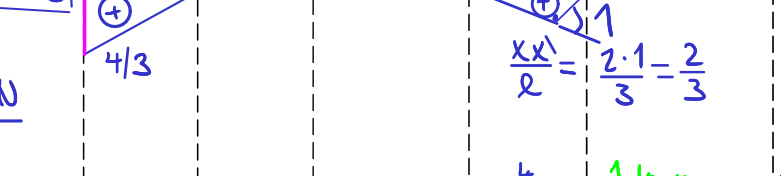
R_a, M_{x3}, V_{x1}



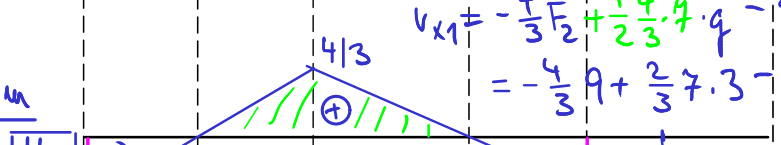
$$R_a = 2 \cdot F_2 + 0.5 \cdot Q = 2 \cdot 9 + \frac{1}{2} \cdot 9 = 22.5 \text{ EN}$$



$$M_{x3} = \frac{4}{3} F_2 - \frac{1}{2} \frac{4}{3} \cdot 7 \cdot q = \frac{4}{3} \cdot 9 - \frac{2}{3} \cdot 7 \cdot 3 = -2 \text{ ENm}$$



$$V_{x1} = -\frac{4}{3} F_2 + \frac{1}{2} \frac{4}{3} \cdot 7 \cdot q - 1 \cdot F_1 = -\frac{4}{3} \cdot 9 + \frac{2}{3} \cdot 7 \cdot 3 - 1 \cdot 6 = -4 \text{ EN}$$



Kontrola základy stav. mech: BDO01

$$\sum M_{xi} = 0 \quad \text{②}$$

$$-F_2 \cdot 6 + R_a \cdot 3 - Q \cdot 1.5 = 0$$

$$R_a = \frac{9 \cdot 6 + 3 \cdot 3 \cdot 1.5}{3} = 22.5 \text{ EN} \checkmark$$