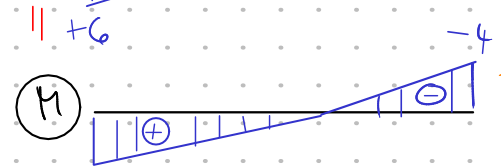
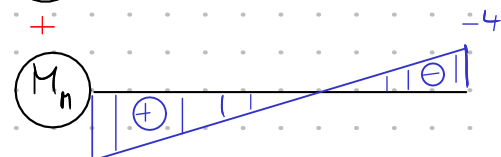
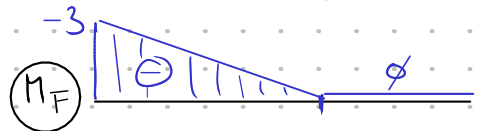


$$E = 40 \text{ GPa}$$

$$I = 5 \cdot 10^8 \text{ mm}^4$$

$$w_b, \varphi_c = ?$$



$$\tilde{M}_b = \tilde{M}(x=3) = -\frac{1}{2} \cdot 3 \cdot 3 \cdot \left(\frac{2}{3} \cdot 3\right) = -9 \text{ kNm}^3$$

$$w_b = w(x=3) = \frac{\tilde{M}}{EI} = -\frac{9}{40 \cdot 10^6 \cdot 5 \cdot 10^{-4}} = -0,45 \cdot 10^{-3} \text{ m}$$

$$\sum M_{b_i} = 0: R \cdot 2 - \frac{1}{2} \cdot 4 \cdot 2 \cdot \left(\frac{2}{3} \cdot 2\right) - \frac{1}{2} \cdot 3 \cdot 3 \cdot \left(\frac{2}{3} \cdot 3\right) = 0 \Rightarrow R = 7,16 \text{ kNm}^2$$

$$\varphi_c = \frac{\tilde{V}_c}{EI} = \frac{7,16}{40 \cdot 10^6 \cdot 5 \cdot 10^{-4}} = 0,3583 \cdot 10^{-3} \text{ rad}$$

