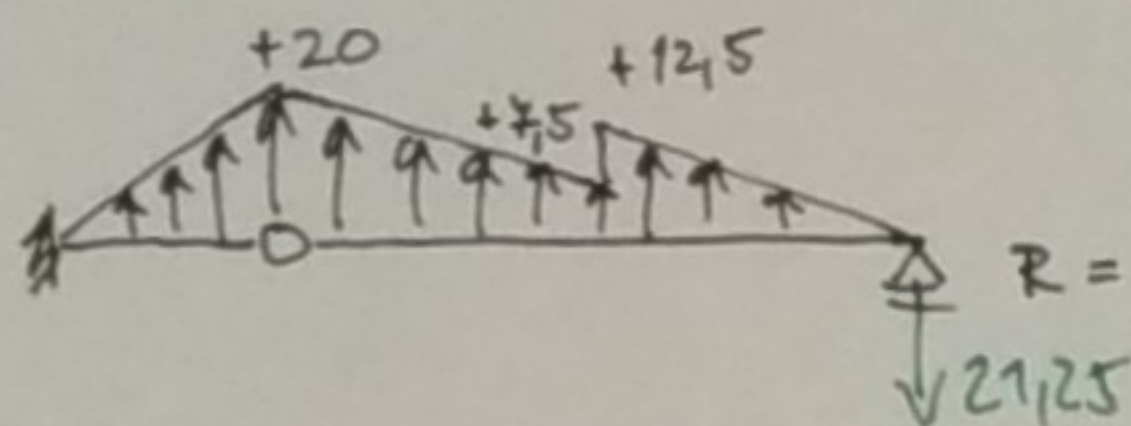
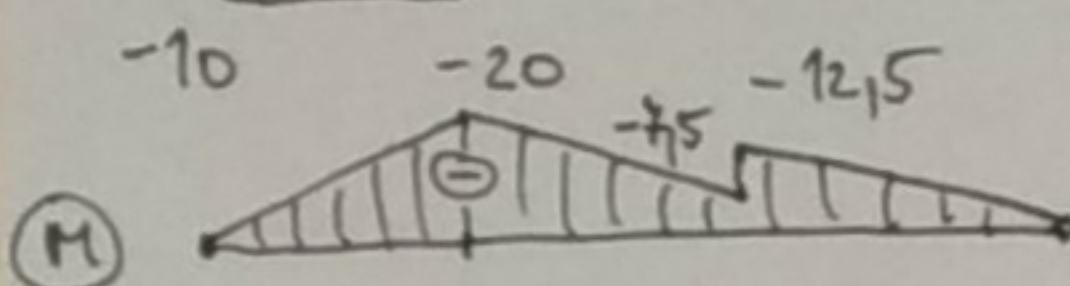
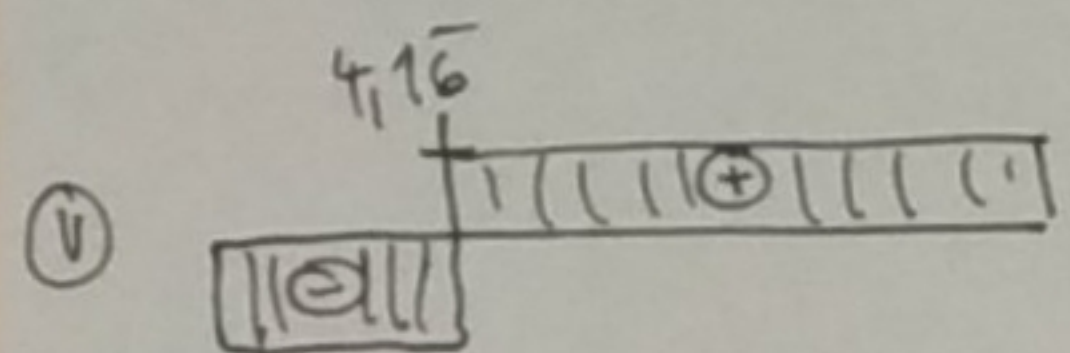
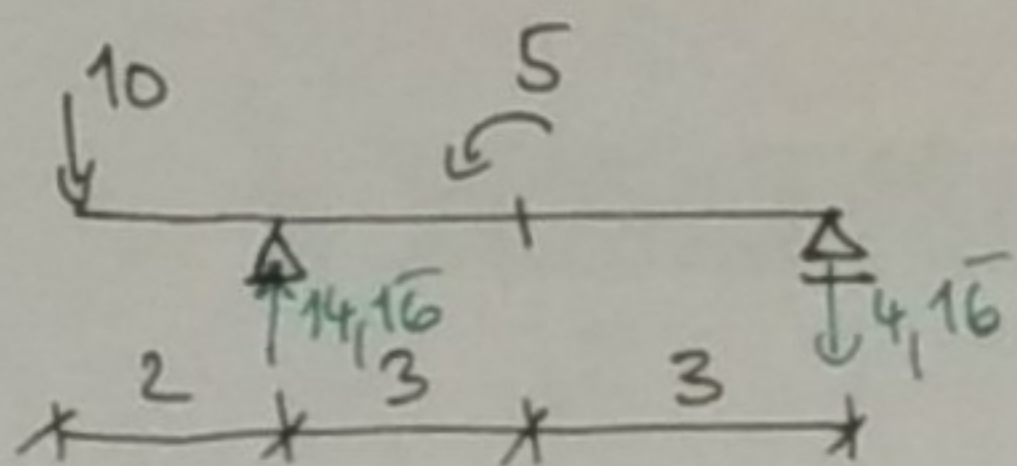


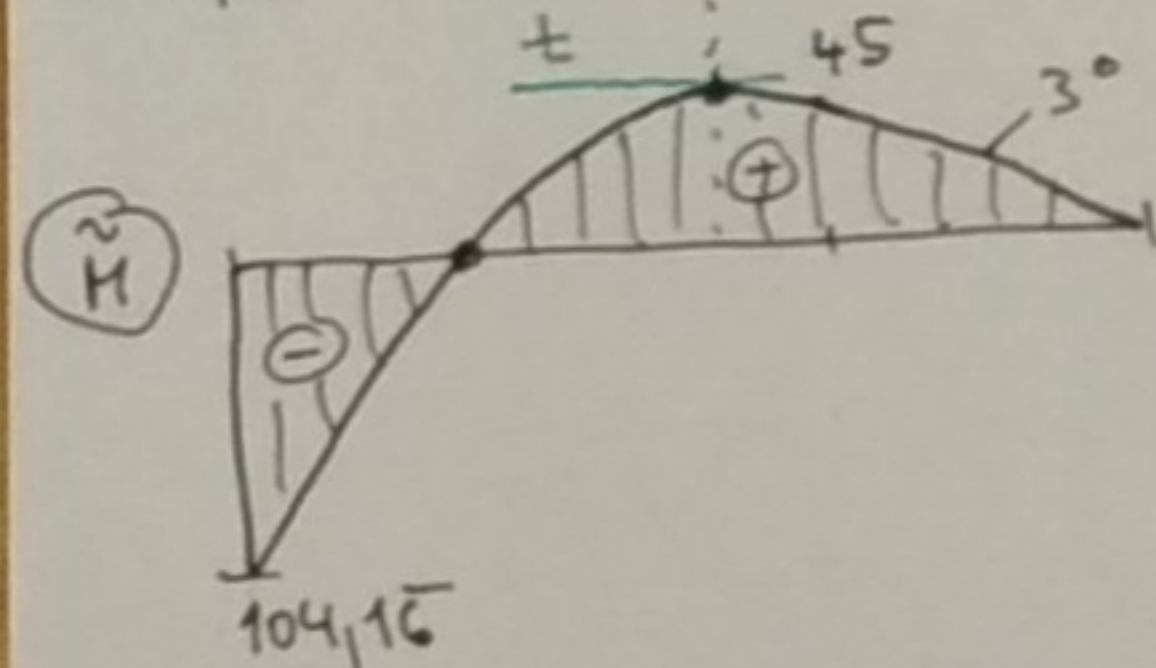
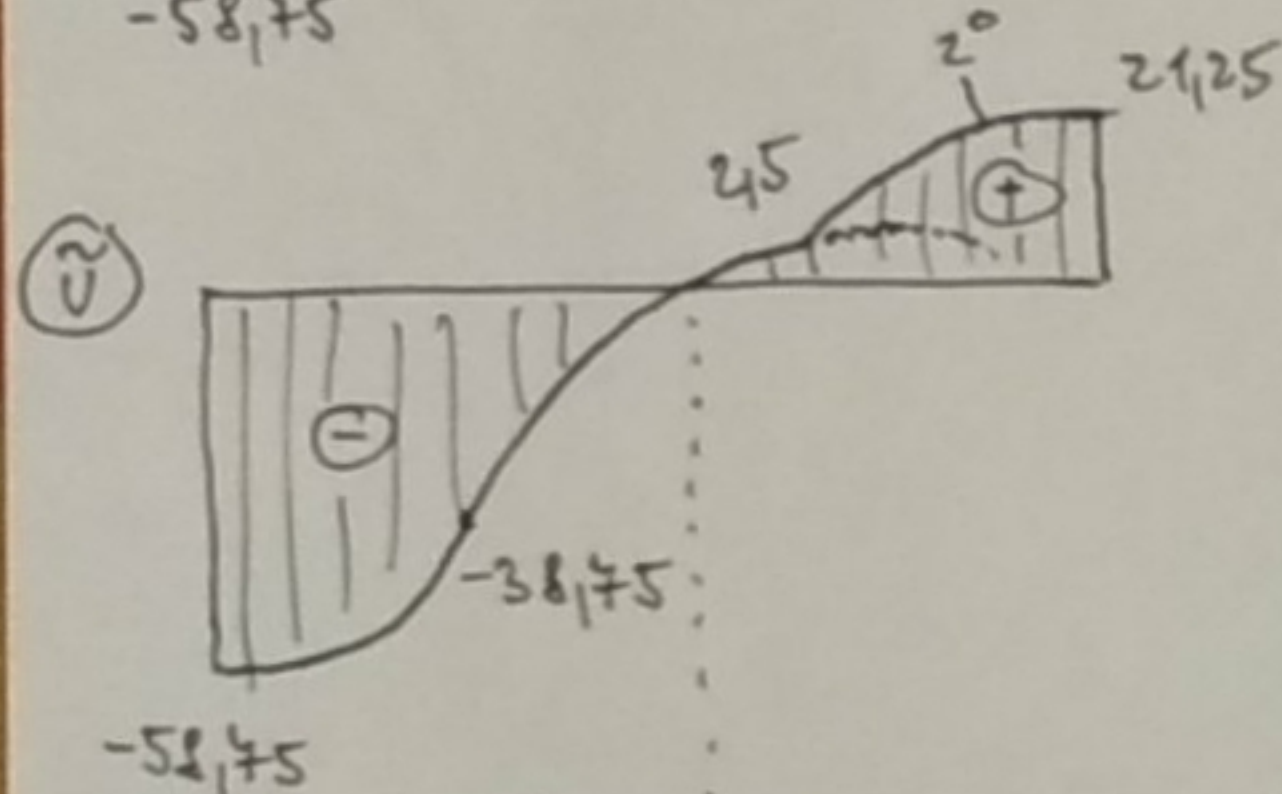
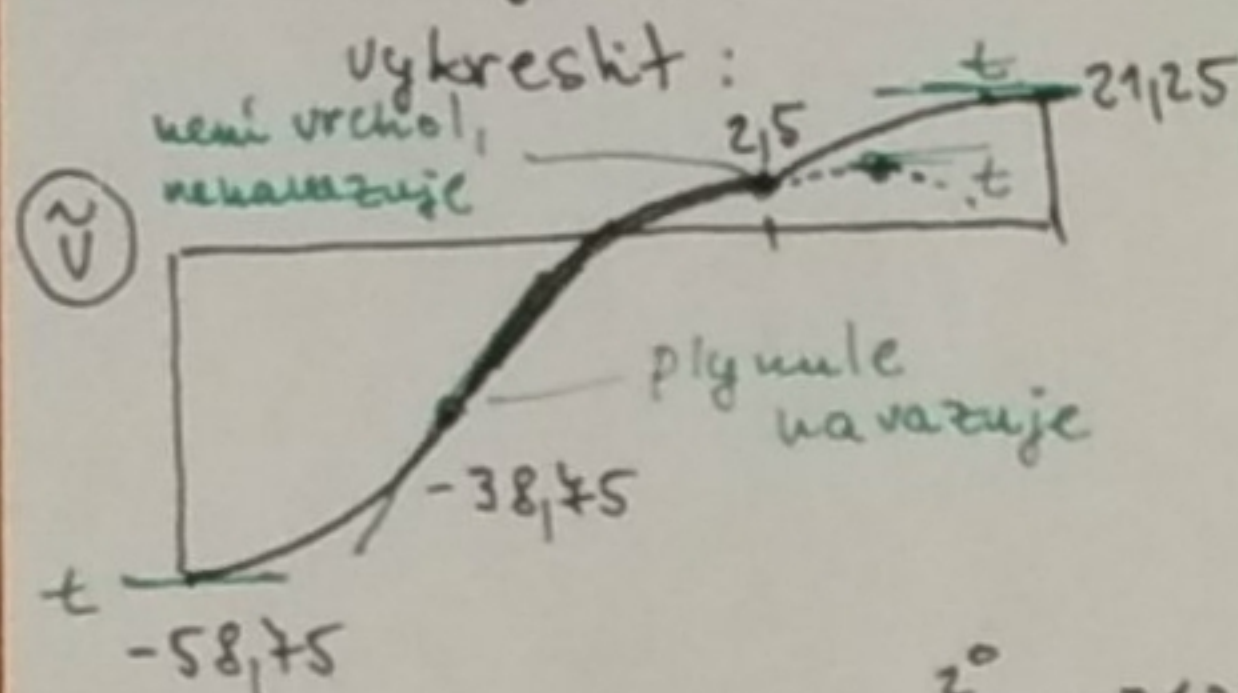


$$R = \frac{\left(\frac{1}{2} \cdot 12.5 \cdot 3\right) \cdot \left(\frac{1}{3} \cdot 3 + 3\right) + (4.5 \cdot 3) \cdot 1.5 + \left[\frac{1}{2} (20 - 4.5) \cdot 3\right] \cdot \frac{1}{3} \cdot 3}{6} = 21.25$$

Pokud bych to chtel

vykreslit:

není vrchol, neuvazuje



$$w(x=5) = \frac{\tilde{M}(x=5)}{EI}$$

$$\tilde{M}(x=5) = 21.25 \cdot 3 + \left(\frac{1}{2} \cdot 12.5 \cdot 3\right) \cdot \frac{1}{3} \cdot 3 = -45$$

$$w(x=5) = -\frac{45}{EI}$$

$$w(x=0) = \frac{\tilde{M}(x=0)}{EI}$$

$$\tilde{M}(x=0) = -21.25 \cdot 6 + \left(\frac{1}{2} \cdot 12.5 \cdot 3\right) \cdot \left(\frac{1}{3} \cdot 3 + 5\right) + \left[\frac{1}{2} (20 - 4.5) \cdot 3\right] \cdot \left(\frac{1}{3} \cdot 3 + 2\right) + (4.5 \cdot 3) \cdot \left(2 + \frac{3}{2}\right) + \left(\frac{1}{2} \cdot 20 \cdot \frac{2}{2}\right) \cdot \frac{2}{3} \cdot 2 = 104.16$$

$$w(x=0) = \frac{104.16}{EI}$$

$$\varphi(x=5) = w'(x=5) = \frac{\tilde{V}(x=5)}{EI}$$

$$\tilde{V}(x=5) = 21.25 - \frac{1}{2} \cdot 12.5 \cdot 3 = 2.5$$

$$\varphi(x=5) = \frac{2.5}{EI}$$

$$\tilde{M}(x=0) = -21.25 \cdot 6 + \frac{1}{2} \cdot 12.5 \cdot 3 \cdot \left(\frac{1}{3} \cdot 3 + 5\right) + \frac{1}{2} \cdot 20 \cdot 3 \cdot \left(\frac{1}{3} \cdot 3 + 2\right) + \frac{1}{2} \cdot 4.5 \cdot 3 \cdot \left(\frac{2}{3} \cdot 3 + 2\right) + \frac{1}{2} \cdot 20 \cdot \frac{2}{2} \cdot \frac{2}{3} \cdot 2 = 104.16$$