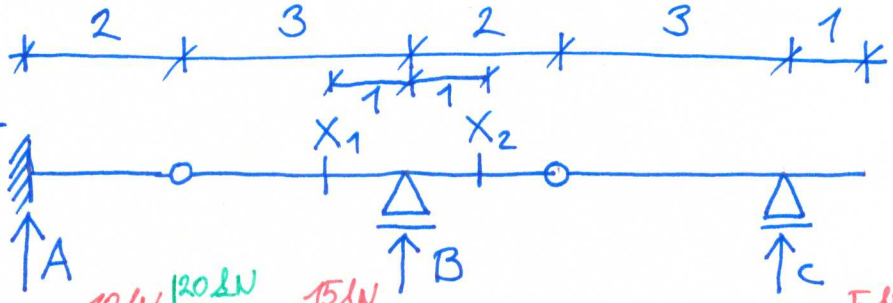
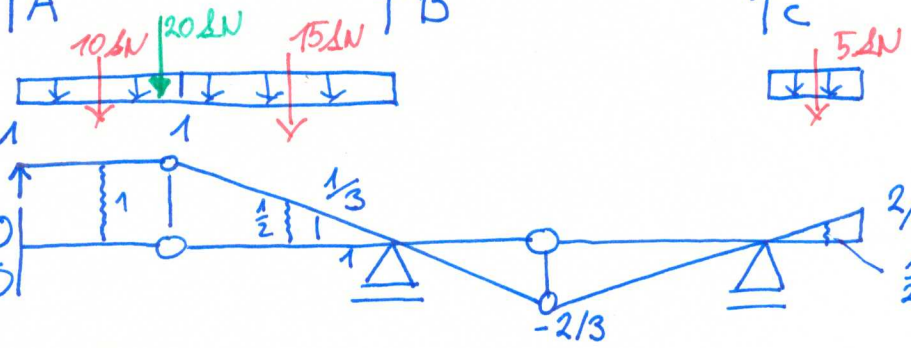


$F = 20\ kN$

$g = 5\ kN/m$

Vyčíslete:
A_{max} ; $R_{M,min}$;
$V_{x1,max}$; $M_{x2,min}$.

zatížení pro A_{max}

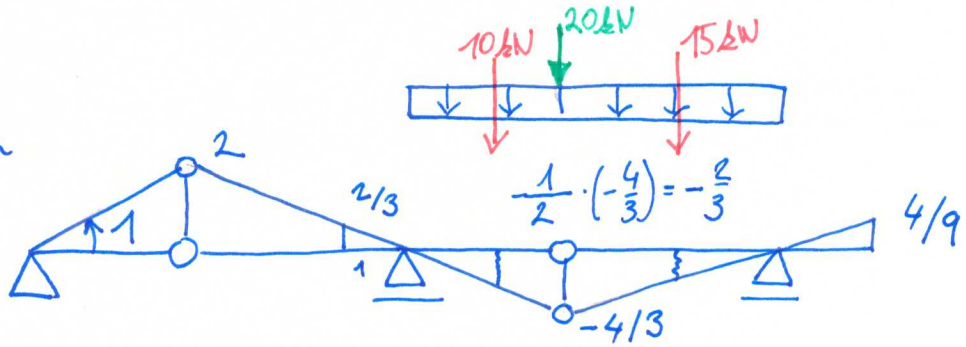


A

$\frac{1}{2} \cdot \frac{2}{9} = \frac{1}{9}$

$$A_{max} = 20 \cdot 1 + 10 \cdot 1 + 15 \cdot \frac{1}{2} + 5 \cdot \frac{1}{2} \cdot \frac{2}{9} = 38{,}05\overline{5}\ kN$$

zatížení pro $R_{M,min}$

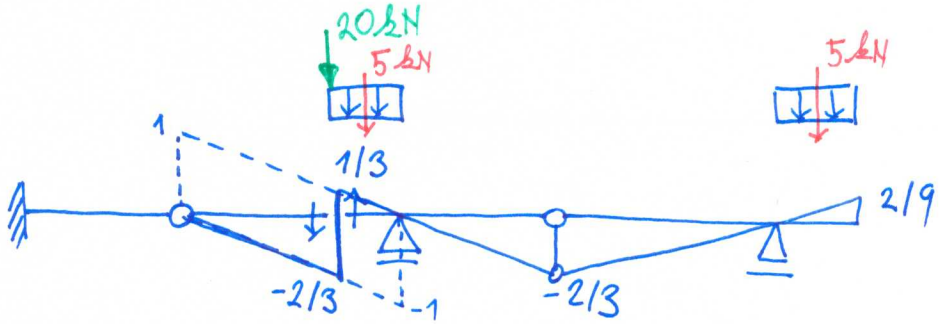


R_M

$\frac{1}{2} \cdot (-\frac{4}{3}) = -\frac{2}{3}$

$$R_{M,min} = 20 \cdot (-\frac{4}{3}) + 10 \cdot (-\frac{2}{3}) + 15 \cdot (-\frac{2}{3}) = -43{,}3\overline{3}\ kNm$$

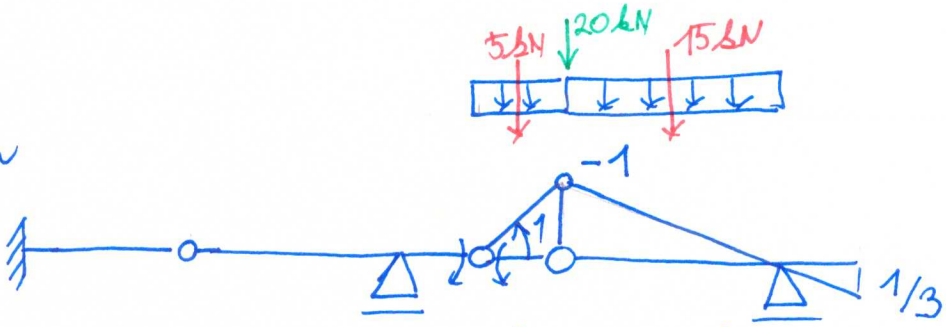
zatížení pro $V_{x1,max}$



V_{x1}

$$V_{x1,max} = 20 \cdot \frac{1}{3} + 5 \cdot \frac{1}{2} \cdot \frac{1}{3} + 5 \cdot \frac{1}{2} \cdot \frac{2}{9} = 8{,}05\overline{5}\ kN$$

zatížení pro $M_{x2,min}$



M_{x2}

$$M_{x2,min} = 20(-1) + 5 \cdot (-\frac{1}{2}) + 15 \cdot (-\frac{1}{2}) = -30\ kNm$$