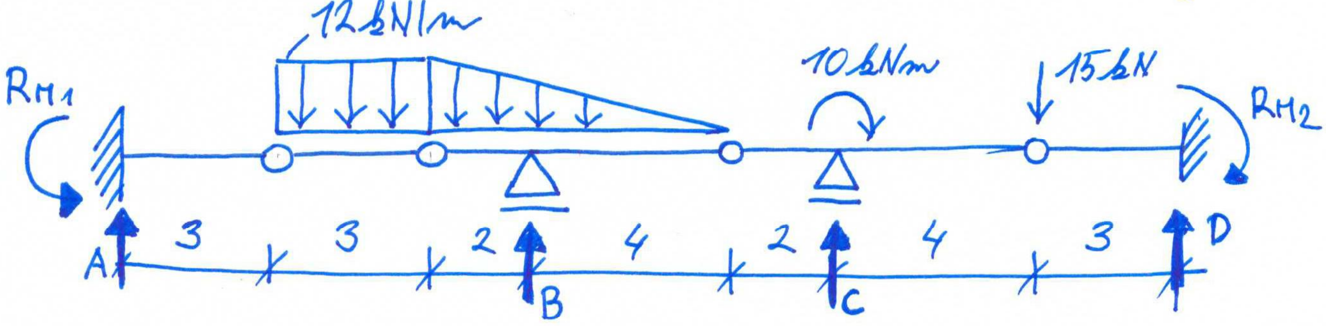
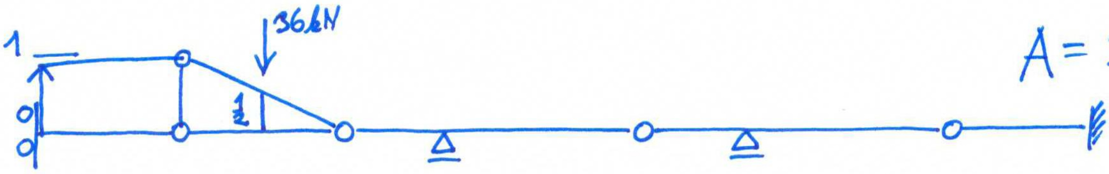
Vyčíslete dané veličiny z příčinkové čáry.

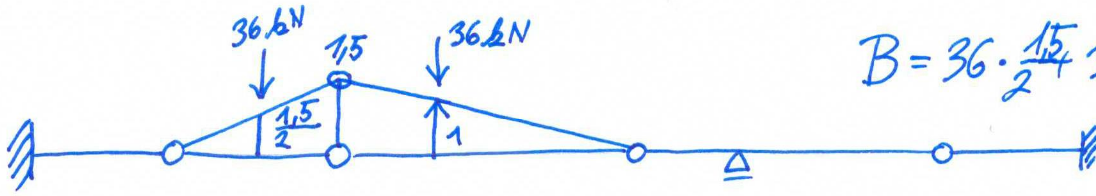


A



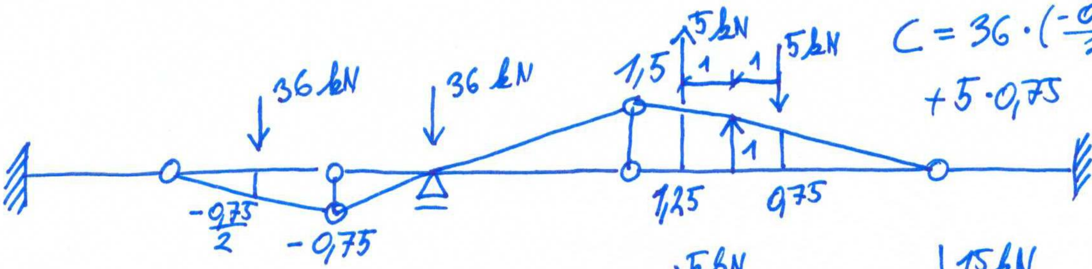
$A = 36 \cdot \frac{1}{2} = \underline{\underline{18\ kN}}$

B



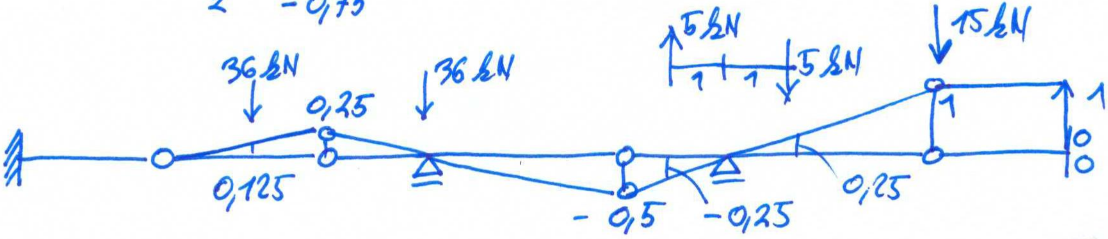
$B = 36 \cdot \frac{1,5}{2} + 36 = \underline{\underline{63\ kN}}$

C



$C = 36 \cdot \left(\frac{-0,75}{2}\right) - 5 \cdot 1,25 + 5 \cdot 0,75 = \underline{\underline{-16\ kN}}$

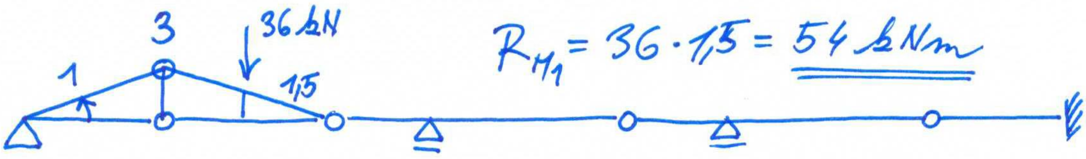
D



$D = 36 \cdot 0,125 - 5 \cdot (-0,25) + 5 \cdot 0,25 + 15 \cdot 1 =$

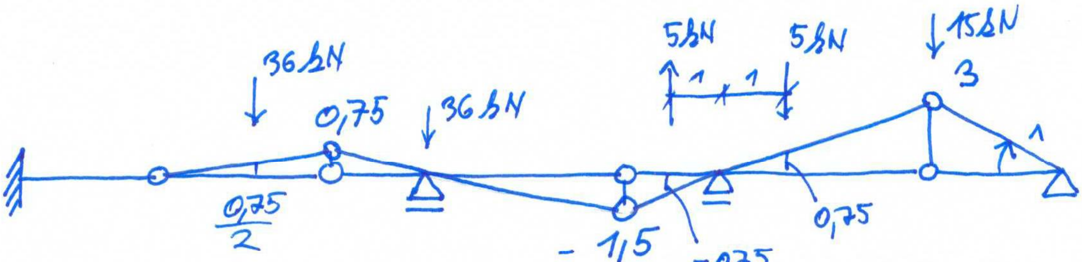
$= \underline{\underline{22\ kN}}$

R_{M1}

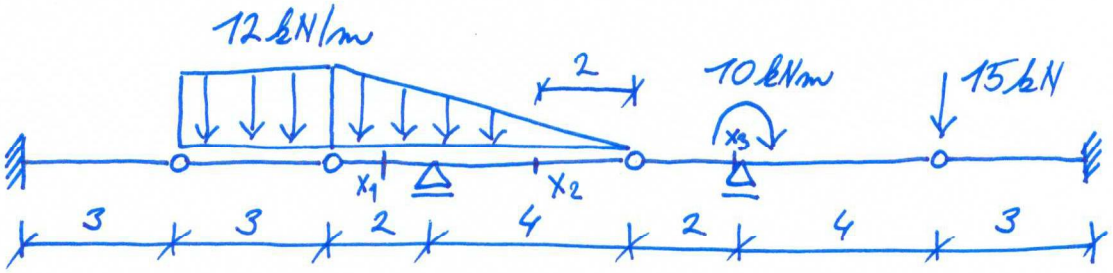


$R_{M1} = 36 \cdot 1,5 = \underline{\underline{54\ kNm}}$

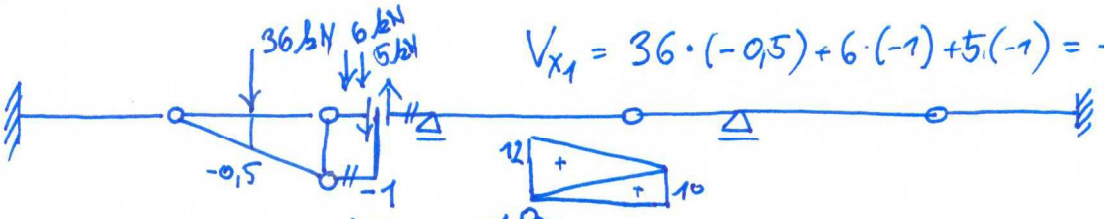
R_{M2}



$R_{M2} = 36 \cdot \frac{0,75}{2} + (-5) \cdot (-0,25) + 5 \cdot (0,75) + 15 \cdot 3 = \underline{\underline{66\ kNm}}$

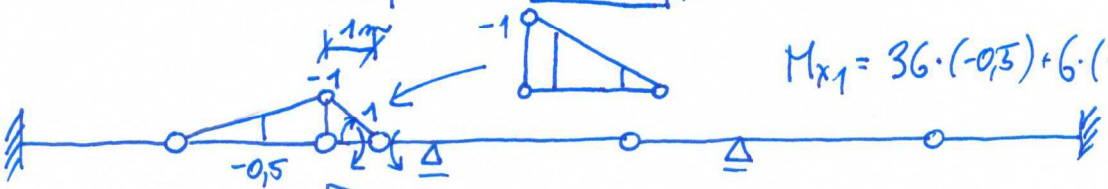


V_{x1}



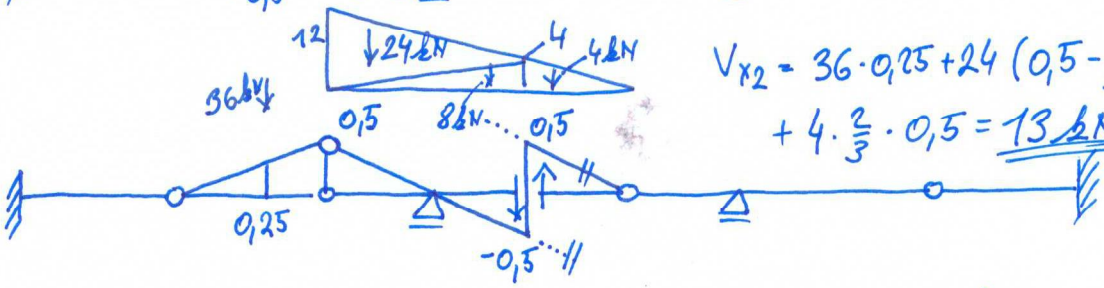
$V_{x1} = 36 \cdot (-0{,}5) + 6 \cdot (-1) + 5 \cdot (-1) = -29\ kN$

M_{x1}



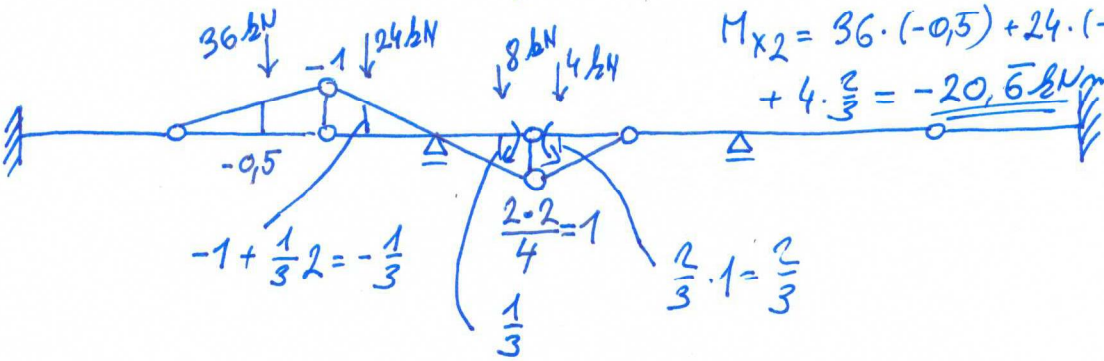
$M_{x1} = 36 \cdot (-0{,}5) + 6 \cdot (-\tfrac{2}{3}) + 5 \cdot (-\tfrac{1}{3}) = -23{,}6\ kNm$

V_{x2}



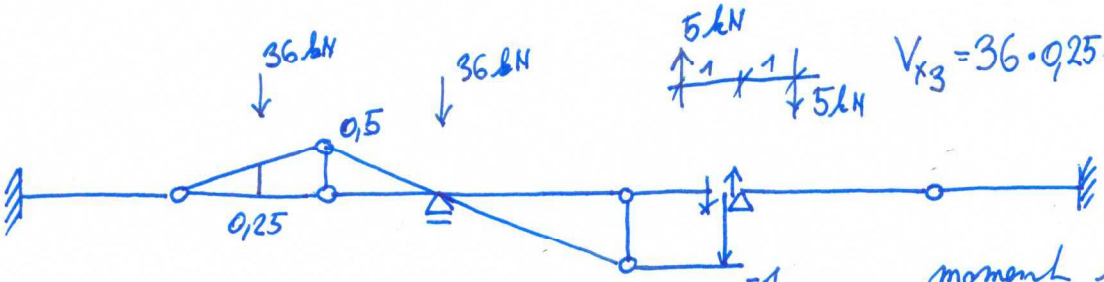
$V_{x2} = 36 \cdot 0{,}25 + 24\,(0{,}5 - \tfrac{1}{3}) + 8 \cdot (-0{,}5 + \tfrac{1}{3}) + 4 \cdot \tfrac{2}{3} \cdot 0{,}5 = 13\ kN$

M_{x2}



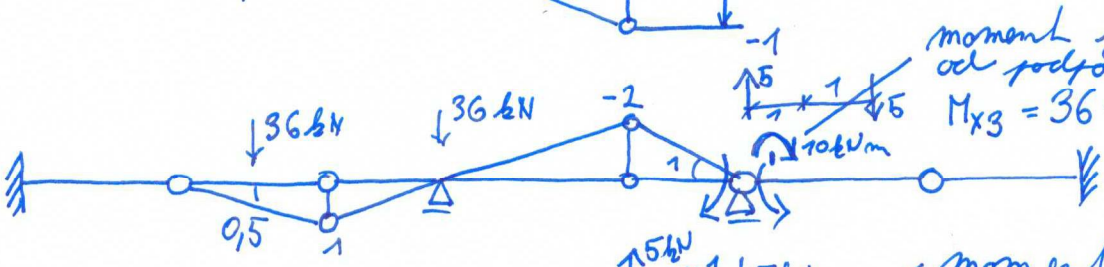
$M_{x2} = 36 \cdot (-0{,}5) + 24 \cdot (-\tfrac{1}{3}) + 8 \cdot \tfrac{1}{3} + 4 \cdot \tfrac{2}{3} = -20{,}6\ kNm$

V_{x3}



$V_{x3} = 36 \cdot 0{,}25 + 0 = 9\ kN$

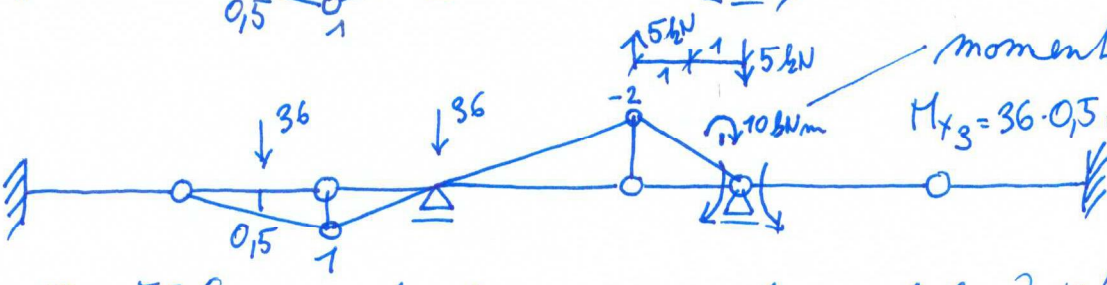
M_{x3}



moment je vpravo od podpory

$M_{x3} = 36 \cdot 0{,}5 = 18\ kNm$

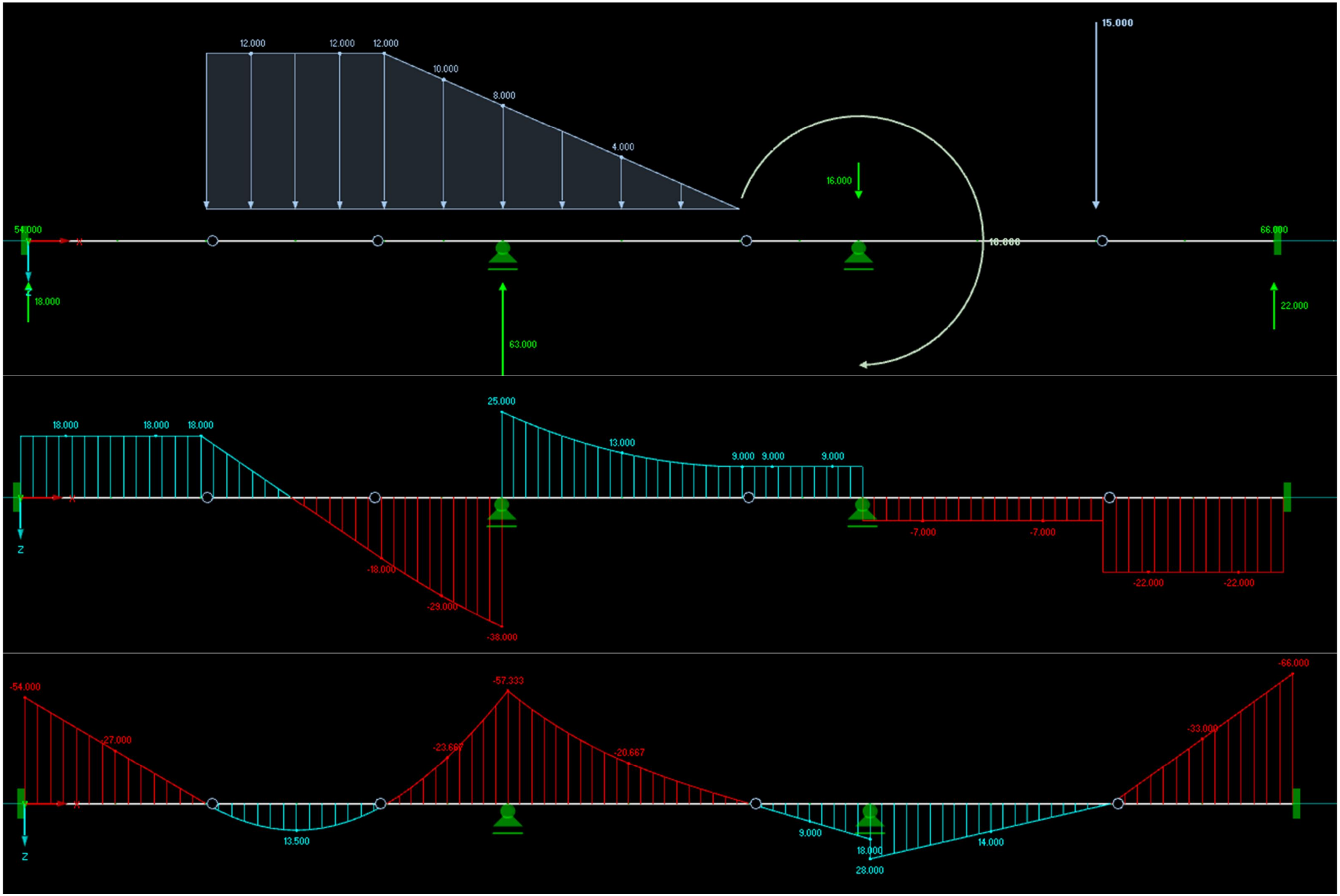
M_{x3}



moment je vlevo

$M_{x3} = 36 \cdot 0{,}5 + (-5) \cdot (-2) = 28\ kNm$

Osamělý moment lze posouvat po jedné přímce.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-38.000
-22.000
-22.000
-54.000
-27.000
-57.333
-23.667
-20.667
-66.000
-33.000
13.500
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