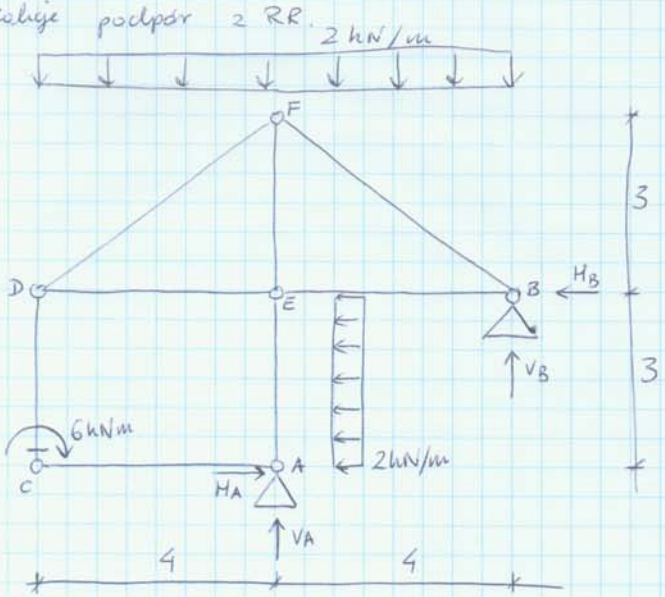
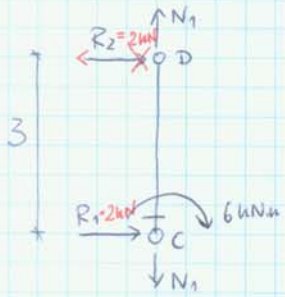
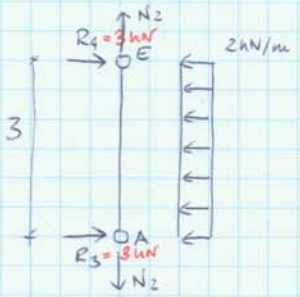
zad 3

Obliczyć reakcje podpór z RR.



„Wycinamy" pręt CD i AE

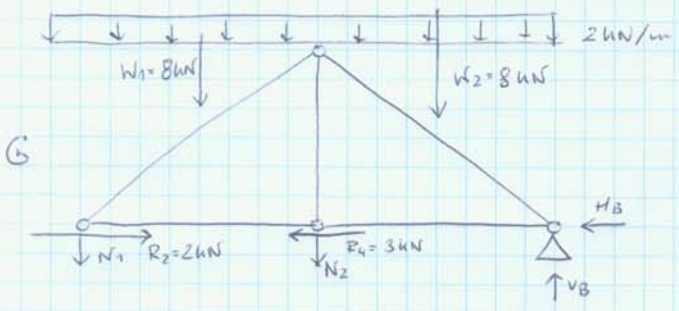




$\Sigma M_D = 0 \quad -6 + R_1 \cdot 3 = 0 \Rightarrow R_1 = 2\,kN$

$\Sigma Y = 0 \quad R_2 = -2\,kN$

$R_3 = R_4 = 3\,kN$



zad 3 / 1

Część D

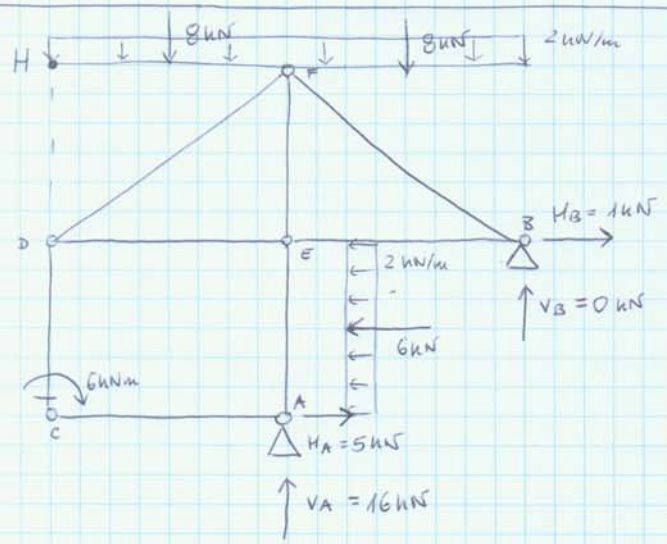
$\Sigma X^D = 0$

$-2 - 3 + H_A = 0 \quad \Rightarrow \quad H_A = 5\,kN$

Część G

$\Sigma X^G = 0$

$2 - 3 - H_B = 0 \quad \Rightarrow H_B = -1\,kN$



$\Sigma M_A = 0$

$-6 + 8 \cdot 2 - 8 \cdot 2 + 6 \cdot 1{,}5 - 1 \cdot 3 + V_B \cdot 4 = 0 \quad \Rightarrow \quad V_B = 0\,kN$

$\Sigma Y = 0 \qquad V_A - 8 - 8 = 0 \quad \Rightarrow \quad V_A = 16\,kN$

Spr. $\qquad \Sigma M_H \overset{?}{=} 0$

$-6 - 8 \cdot 2 - 8 \cdot 6 - 6 \cdot 4{,}5 + 1 \cdot 3 + 16 \cdot 4 + 5 \cdot 6 = 0$ ✓

$\Sigma X = 0$

$5 + 1 - 6 = 0$ ✓

zad 3/2