4. Draw the free-body diagram and N, V, M diagrams of the structure! (8 + 8 points)

Scan your calculations and internal force diagrams and submit them in Moodle!



Example data:

Data	p [kN/proj.m]	M [kNm]	a [m]	<i>b</i> [<i>m</i>]	h [m]
example	5	2	2	3	3
individual					

Example results:

Results

example

 N_{1A}

The data indicated with grey colour should be given as signed value at the web site! positive supports: $\uparrow \rightarrow$.

 N_{1D}

 N_{2B}

s signed value at the $\xrightarrow{\oplus} \bigvee_{M}^{V} \xrightarrow{N} \bigvee_{V}^{N}$	$\underbrace{\overset{N}{\overbrace{V}}}_{V}^{M}$	
N_{3D} N_{3E} N_{4E} N_{4C}		

individual								
	<i>V</i> _{1<i>A</i>}	V _{1D}	<i>V</i> _{2<i>B</i>}	V _{2D}	V _{3D}	V_{3E}	V_{4E}	V_{4C}
example								
individual								
	<i>M</i> _{1<i>A</i>}	<i>M</i> _{1D}	<i>M</i> _{2<i>B</i>}	M _{2D}	M _{3D}	M_{3E}	M_{4E}	M _{4C}
example								
individual								

 N_{2D}

Results	<i>M_{max}</i> [kNm]	A_x [kN]	A_y [kN]	B_{χ} [kN]	B_y [kN]	C_x [kN]	C_y [kN]
example							
individual							