BME Department of Mechanics, Materials and Structures   Statics

HW5. Internal forces of simple beams – skew beams, broken segments, branching   11.03.2020.
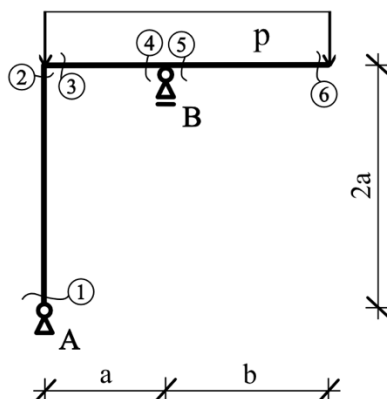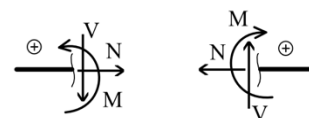
3. Draw the internal force diagram of the structure! (7 + 6 points)

The internal force diagrams should be handed in in paper format!

Data	$p\ [kN/m]$	$a\ [m]$	$b\ [m]$
Example	5	3	4
Individual			

The data marked by grey colour should be a signed value! Supports: positive ↑, →.

Results	N_1	N_2	N_3	N_4	N_5	N_6
Example	+5,83	+5,83	0	0	0	0
Individual						
	V_1	V_2	V_3	V_4	V_5	V_6
Example	0	0	-5,83	-20,83	+20	0
Individual						
	M_1	M_2	M_3	M_4	M_5	M_6
Example	0	0	0	-40	-40	0
Individual						

	b_{3-4} [kNm]	b_{5-6} [kNm]	A_x [kN]	A_y [kN]	B_y [kN]
Example	5,63	10	0	-5,83	+40,83
Individual					