Remarks: See §5.5, page 176 till 183

Answers: All forces in kN and moments in kNm
The normal force in BD positive as a tensile force

1a. $A_h = 30\ (\rightarrow)$; $A_v = 30\ (\uparrow)$; $A_m = 90\ (\circlearrowleft)$

1b. $N^{(BD)} = -30\sqrt{2} = -42,43$

2a. $A_h = 15\ (\rightarrow)$; $A_v = 30\ (\uparrow)$; $A_m = 0$

2b. $N^{(BD)} = +30\sqrt{2} = +42,43$

3a. $A_h = 25\ (\leftarrow)$; $A_v = 30\ (\uparrow)$; $A_m = 120\ (\circlearrowleft)$

3b. $N^{(BD)} = +5\sqrt{13} = +18,03$