

Remarks: See §5.6, page 184 till 186

Answers: All forces in kN and moments in kNm

The normal force in a bar positive as a tensile force

$$1a. A_h = 0; A_v = 50 (\uparrow); B_v = 10 (\uparrow)$$

$$1b. N^{(a)} = N^{(e)} = +25$$

$$N^{(b)} = N^{(d)} = -5\sqrt{13} = -18,03$$

$$N^{(e)} = +30$$

$$2a. A_h = 0; A_v = 40 (\uparrow); B_v = 20 (\uparrow)$$

$$2b. N^{(a)} = N^{(e)} = +50$$

$$N^{(b)} = N^{(d)} = -10\sqrt{13} = -36,06$$

$$N^{(e)} = +60$$

$$3a. A_h = 0; A_v = B_v = 30 (\uparrow)$$

$$3b. N^{(a)} = N^{(e)} = +75$$

$$N^{(b)} = N^{(d)} = -15\sqrt{13} = -54,08$$

$$N^{(e)} = +90$$