**Remarks:** See §5.5, page 176 till 183

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

1. 
$$A_{\rm h} = 0$$
;  $A_{\rm v} = 24 \ (\uparrow)$ ;  $B_{\rm v} = 12 \ (\uparrow)$   
 $N^{\rm (BD)} = +4\sqrt{17} = +16,49$   
 $N^{\rm (BC)} = -16\sqrt{2} = -22,63$ 

ADC isn't a two-force member

2. 
$$A_{\rm h} = 0$$
;  $A_{\rm v} = 6$  ( $\uparrow$ );  $B_{\rm v} = 30$  ( $\uparrow$ )  
 $N^{\rm (BD)} = +4\sqrt{17} = +16,49$ 

ADC and BC aren't two-force members

3. 
$$A_h = 0$$
;  $A_v = 12 (\uparrow)$ ;  $B_v = 24 (\uparrow)$   
 $N^{(BC)} = -8\sqrt{2} = -11.31$ 

ADC and BC aren't two-force members