

Opmerkingen: Zie §5.7, blz. 177 t/m 180

Antwoorden: Alle krachten in kN

De normaalkracht in een pendelstaaf is positief als
trekkracht en negatief als drukkracht

1a. $A_h = 0$; $A_v = 15$ ($\uparrow$); $B_v = 5$ ($\downarrow$)
 $C_h = 20$ ($\rightarrow$); $D_h = 20$ ($\leftarrow$); $C_v = D_v = 15$ ($\uparrow$)

1b. $N^{(a)} = -25$
 $N^{(b)} = -10$
 $N^{(c)} = -5\sqrt{17} = -20,62$
 $N^{(d)} = -10$

2a. $A_h = 0$; $A_v = 14$ ($\uparrow$); $B_v = 6$ ($\downarrow$)
 $C_h = 16$ ($\rightarrow$); $D_h = 16$ ($\leftarrow$); $C_v = D_v = 16$ ($\uparrow$)

2b. $N^{(a)} = -16\sqrt{2} = -22,63$
 $N^{(b)} = -12$
 $N^{(c)} = -4\sqrt{17} = -16,49$
 $N^{(d)} = -8$

3a. $A_h = 0$; $A_v = 20$ ($\uparrow$); $B_v = 0$
 $C_h = 80$ ($\rightarrow$); $D_h = 80$ ($\leftarrow$); $C_v = D_v = 60$ ($\uparrow$)

3b. $N^{(a)} = -100$
 $N^{(b)} = -40$
 $N^{(c)} = -20\sqrt{17} = -82,46$
 $N^{(d)} = -40$

4a. $A_h = 0$; $A_v = 16$ ($\uparrow$); $B_v = 4$ ($\downarrow$)
 $C_h = 64$ ($\rightarrow$); $D_h = 64$ ($\leftarrow$); $C_v = D_v = 64$ ($\uparrow$)

4b. $N^{(a)} = -64\sqrt{2} = -90,51$
 $N^{(b)} = -48$
 $N^{(c)} = -16\sqrt{17} = -65,97$
 $N^{(d)} = -32$