Opmerkingen: Zie §5.6, blz. 174 t/m 176

Antwoorden: Alle krachten in kN
De normaalkracht in een pendelstaaf is positief als trekkracht en negatief als drukkracht

Let op: De geknikte staven AS en BS zijn geen pendelstaven

1a. $A_h = 0\,;\ A_v = 20\ (\uparrow)\,;\ B_v = 40\ (\uparrow)$
1b. $N^{(a)} = +10\sqrt{5} = +22,36$
$N^{(b)} = +10\sqrt{2} = +14,14$
$N^{(c)} = +30$
$N^{(d)} = +50\sqrt{2} = +70,71$
$N^{(e)} = -10\sqrt{5} = -22,36$

2a. $A_h = 0\,;\ A_v = 30\ (\uparrow)\,;\ B_v = 30\ (\uparrow)$
2b. $N^{(a)} = N^{(e)} = +15\sqrt{5} = +33,54$
$N^{(b)} = N^{(d)} = +15\sqrt{2} = +21,21$
$N^{(c)} = +45$

3a. $A_h = 0\,;\ A_v = 50\ (\uparrow)\,;\ B_v = 10\ (\uparrow)$
3b. $N^{(a)} = N^{(e)} = +5\sqrt{5} = +11,18$
$N^{(b)} = N^{(d)} = +5\sqrt{2} = +7,07$
$N^{(c)} = +15$

4a. $A_h = 60\ (\leftarrow)\,;\ A_v = 30\ (\downarrow)\,;\ B_v = 30\ (\uparrow)$
4b. $N^{(a)} = N^{(e)} = +15\sqrt{5} = +33,54$
$N^{(b)} = N^{(d)} = +15\sqrt{2} = +21,21$
$N^{(c)} = +45$

5a. $A_h = 60\ (\leftarrow)\,;\ A_v = 20\ (\downarrow)\,;\ B_v = 20\ (\uparrow)$
5b. $N^{(a)} = N^{(e)} = +10\sqrt{5} = +22,36$
$N^{(b)} = N^{(d)} = +10\sqrt{2} = +14,14$
$N^{(c)} = +30$

6a. $A_h = 60\ (\leftarrow)\,;\ A_v = 20\ (\downarrow)\,;\ B_v = 20\ (\downarrow)$
6b. $N^{(a)} = N^{(e)} = +20\sqrt{5} = +44,72$
$N^{(b)} = N^{(d)} = +20\sqrt{2} = +28,28$
$N^{(c)} = +60$