

**Antwoorden:** All forces in kN

The normal force in a bar positive as a tensile force and negative as a compressive force.

1a.  $A_h = 30$  ( $\leftarrow$ );  $A_v = 60$  ( $\downarrow$ )

$B_h = 30$  ( $\leftarrow$ );  $B_v = 60$  ( $\uparrow$ )

1c.  $N^{(1)} = +50$

$N^{(2)} = -100$

2a.  $A_h = 60$  ( $\leftarrow$ );  $A_v = 45$  ( $\downarrow$ )

$B_h = 0$ ;  $B_v = 45$  ( $\uparrow$ )

2c.  $N^{(1)} = -60$

$N^{(2)} = +75$

3a.  $A_h = 78$  ( $\leftarrow$ );  $A_v = 36$  ( $\downarrow$ )

$B_h = 18$  ( $\rightarrow$ );  $B_v = 36$  ( $\uparrow$ )

3c.  $N^{(1)} = -30$

$N^{(2)} = +60$

4a.  $A_h = 30$  ( $\rightarrow$ );  $A_v = 90$  ( $\downarrow$ )

$B_h = 90$  ( $\leftarrow$ );  $B_v = 90$  ( $\uparrow$ )

3c.  $N^{(1)} = +30$

$N^{(2)} = -150$