

Remarks: See §5.1, page 154 till 162

And the examples 2 on page 155

Hints:

Find B_h from the moment equilibrium about A.

Find B_v from the direction of two-force member BC

Find the support reactions in A from horizontal and vertical equilibrium

Answers:

a. $A_h = 1 \text{ kN } (\leftarrow)$; $A_v = 0,5 \text{ kN } (\uparrow)$

$B_h = 1 \text{ kN } (\rightarrow)$; $B_v = 1 \text{ kN } (\uparrow)$

b. $A_h = 0,5 \text{ kN } (\leftarrow)$; $A_v = 0$

$B_h = 0,5 \text{ kN } (\rightarrow)$; $B_v = 0,5 \text{ kN } (\uparrow)$

c. $A_h = 1,5 \text{ kN } (\leftarrow)$; $A_v = 0,5 \text{ kN } (\uparrow)$

$B_h = 1,5 \text{ kN } (\rightarrow)$; $B_v = 1,5 \text{ kN } (\uparrow)$

Opmerking:

In case of load combination c you can also superposition load combinations a and b.