ANSWERS – VOLUME 1: EQUILIBRIUM Chapter 6, Loads

Remarks:See §6.3.1, page 219 till 223Also see §5.5, example 2 on page 180

Replace the distributed load by its resultant on the part where the equilibrium is taken in consideration.

Signs for $N^{(DE)}$, the force in bar DE:

- Positive as a tensile force
- Negative as a compressive force

Answers:

a.
$$A_{\rm h} = 8 \text{ kN} (\leftarrow); A_{\rm v} = 11 \text{ kN} (\uparrow); B_{\rm v} = 5 \text{ kN} (\uparrow)$$

b. $N^{(DE)} = +20 \text{ kN}$