

Remarks: See §9.3.2, page 351 till 363

Answers:

$$N^{(1)} = +1,5\sqrt{2} \text{ kN} = +2,12 \text{ kN}$$

$$N^{(2)} = -1,5\sqrt{17} \text{ kN} = -6,18 \text{ kN}$$

$$N^{(3)} = +\sqrt{5} \text{ kN} = +2,24 \text{ kN}$$

$$N^{(4)} = +2\sqrt{2} \text{ kN} = +2,83 \text{ kN}$$

$$N^{(5)} = -0,5 \text{ kN}$$

Remarks:

Joint order: **D** → **C** → **B** → **A**

From the joint equilibrium in A and B you'll find the support reactions.

$$B_h = 4 \text{ kN} (\rightarrow)$$

$$A_h = 4 \text{ kN} (\leftarrow); A_v = 3 \text{ kN} (\uparrow)$$

The figure shows the force polygon for joint D with scale: 1 square $\equiv 0,5 \text{ kN}$

