Chapter 9, Trusses

Remarks: See §9.3.2, page 351 till 363

Answers:

$$N^{(1)} = -5\sqrt{37} \text{ kN} = -30,41 \text{ kN}$$

 $N^{(2)} = -10 \text{ kN}$
 $N^{(3)} = +5\sqrt{5} \text{ kN} = +11,18 \text{ kN}$
 $N^{(4)} = -10 \text{ kN}$

 $N^{(5)} = +5\sqrt{5} \text{ kN} = +11,18 \text{ kN}$

Remarks:

First calculate support reactions. Start calculating the forces in the members at one of the supports.

Draw forces polygons on paper with squares. Take as a scale:

$$1 \text{ kN} \equiv 0.5 \text{ cm}$$

The figure shows the closed force polygon for the equilibrium of the left support. The support reactions are green.

