Remarks: See §2.3, pages 24 till 26
See §2.6, pages 34 onwards

Answers 2.28-1:

a. $N^{AB} = +50$ kN $N^{BC} = +40$ kN $N^{CD} = +60$ kN
b. $\varepsilon^{AB} = 1$ ‰ $\varepsilon^{BC} = 1,25$ ‰ $\varepsilon^{CD} = 0,75$ ‰
c. $\Delta\ell^{AB} = 0,4$ mm $\Delta\ell^{BC} = 1,0$ mm $\Delta\ell^{CD} = 0,45$ mm
d. $\Delta\ell = 1,85$ mm

Explanation 2.28-1/2:

$EA^{AB} = 50\times10^3$ kN
$EA^{BC} = 32\times10^3$ kN
$EA^{CD} = 80\times10^3$ kN

Answers 2.28-2:

a. $N^{AB} = +25$ kN $N^{BC} = -20$ kN $N^{CD} = +40$ kN
b. $\varepsilon^{AB} = 0,5$ ‰ $\varepsilon^{BC} = -0,625$ ‰ $\varepsilon^{CD} = 0,5$ ‰
c. $\Delta\ell^{AB} = 0,2$ mm $\Delta\ell^{BC} = -0,5$ mm $\Delta\ell^{CD} = 0,3$ mm
d. $\Delta\ell = 0$