

Remarks: See §2.2.1, pages 19 till 21
See §2.3, pages 24 till 26
See §2.6, pages 34 onwards

Answers:

- a. $\Delta \ell^{bush} = -0,08 \text{ mm}$
- b. $\Delta \ell^{bar} = +0,16 \text{ mm}$
- c. $0,24 \text{ mm}$

Explanation:

$$\text{a. } \Delta \ell^{bush} = \frac{(-56 \text{ kN})(300 \text{ mm})}{(210 \text{ kN/mm}^2)(1000 \text{ mm}^2)} = -0,08 \text{ mm}$$

$$\text{b. } \Delta \ell^{bar} = \frac{(+56 \text{ kN})(300 \text{ mm})}{(210 \text{ kN/mm}^2)(500 \text{ mm}^2)} = +0,16 \text{ mm}$$

$$\text{c. } \left| \Delta \ell^{bush} \right| + \left| \Delta \ell^{bar} \right| = 0,24 \text{ mm}$$