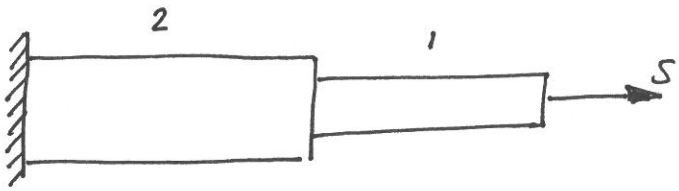
2.1.2.

Givet

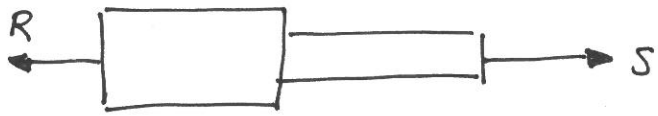



× Rak stång, 2-delar
× Areor $A_1$ $A_2$

Sökt Dragspänning i del 1 och i del 2

Lösning

1. Frilägg

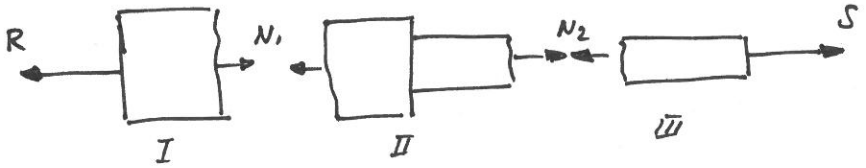



2. Jämviht

$\rightarrow : -R + S = 0$

$\Leftrightarrow \underline{R = S}$

3. Snitta




4. Jämviht

$\rightarrow_{I} : -R + N_1 = 0 \Rightarrow R = \underline{N_1 = S}$

$\rightarrow_{II} : -N_1 + N_2 = 0 \Rightarrow N_1 = \underline{N_2 = S}$

$(\rightarrow_{III} : -N_2 + S = 0 \Rightarrow N_2 = S)$

5. Normalspänning

$$\left[\sigma = \frac{N}{A}\right] \Rightarrow \begin{cases} \sigma_1 = \dfrac{N_1}{A_1} = \dfrac{S}{A_1} \\ \sigma_2 = \dfrac{N_2}{A_2} = \dfrac{S}{A_2} \end{cases}$$