

$$d = 3,5 \text{ cm}$$

$$k = 0,1019 \text{ N/cm}$$

$$T = F \cdot d =$$

$$l_{\text{initial}} = \frac{49,5}{2} = 24,75 \text{ cm}$$

$$l_{\text{final}} = 30 \text{ cm}$$

$$\Delta x = l_{\text{final}} - l_{\text{initial}} = 30 - 24,75 = 5,25 \text{ cm}$$

$$F = 0,1019 \text{ N/cm} \cdot 0,5 \text{ cm} = 0,05095 \text{ N}$$

$$T = F \cdot d = 0,05095 \text{ N} \cdot 3,5 = 0,178325 \text{ Ncm}$$