

Elastic Bars

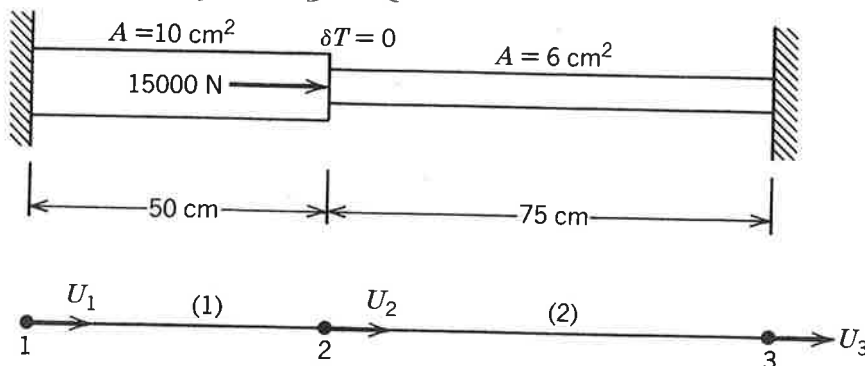


Figure P17.1

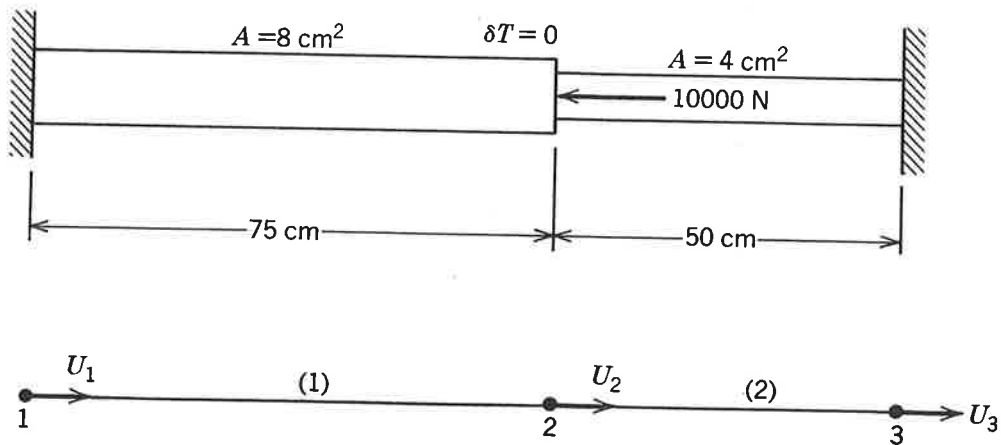


Figure P17.2

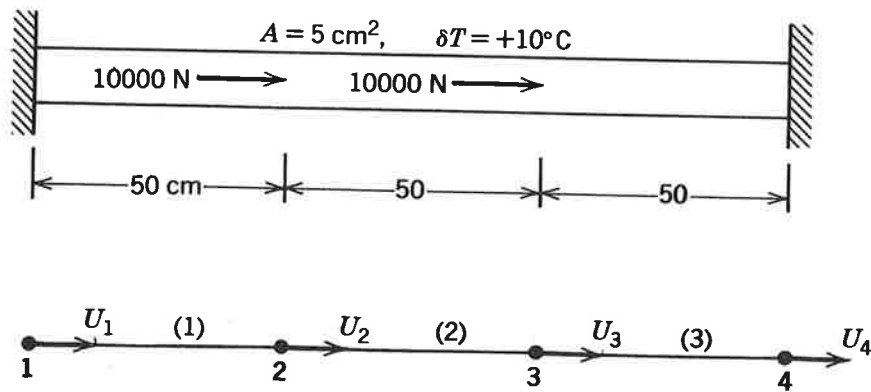


Figure P17.3

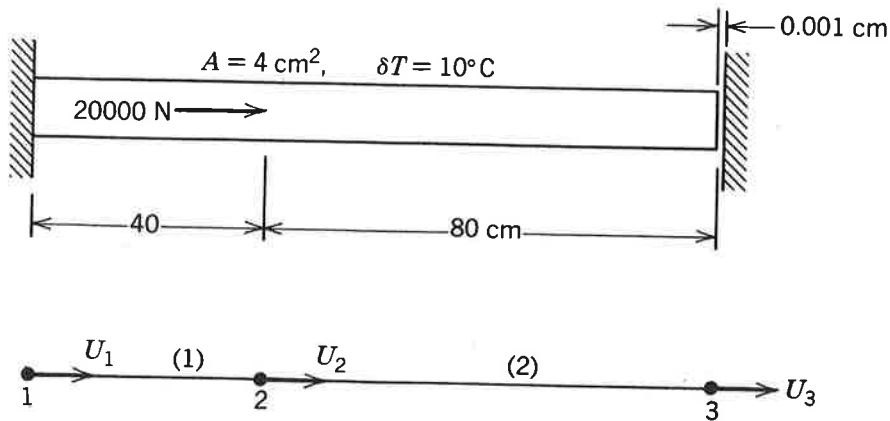


Figure P17.4

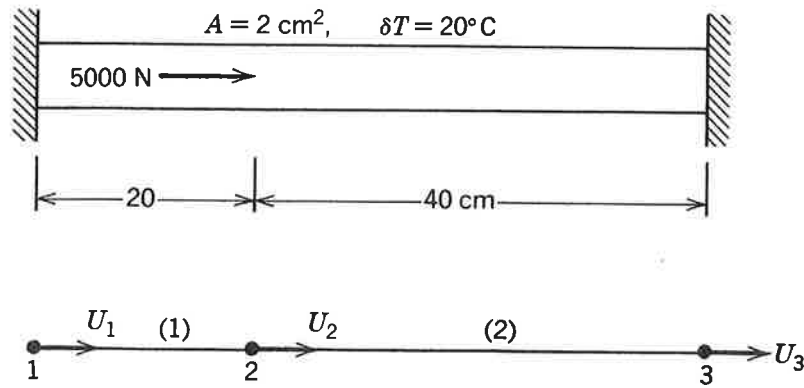


Figure P17.5

PROBLEMS

17.1–17.5 Calculate the axial force in each member of the structural system shown in the corresponding figure. In each problem, $E = 20(10^6) \text{ N/cm}^2$ and $\alpha = 11(10^{-6})/^\circ \text{C}$.

17.1 $U_2 = 0.002679$

17.3 $U_2 = U_3 = 0.00500$