

Chapter 2

Two-dimensional problems in elasticity

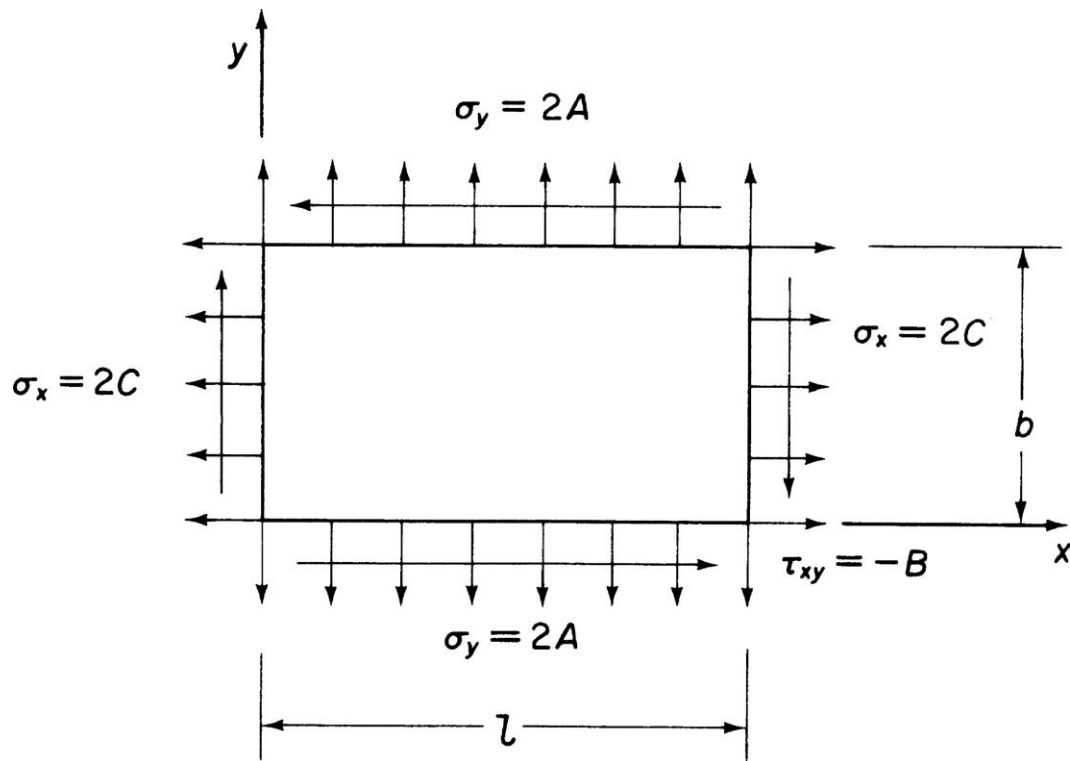
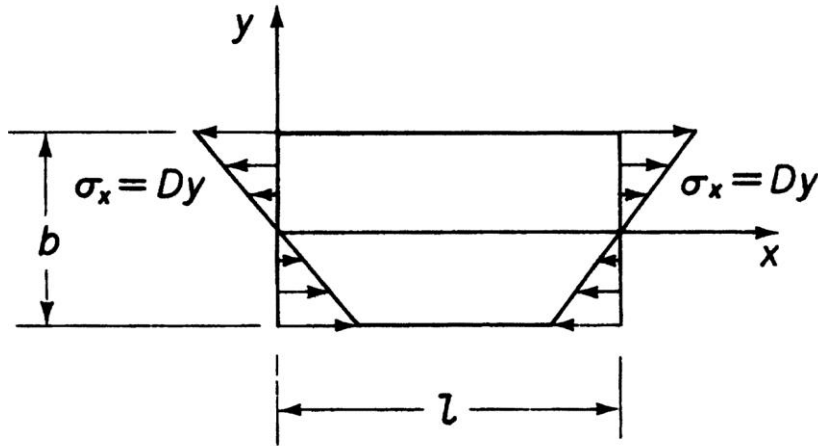
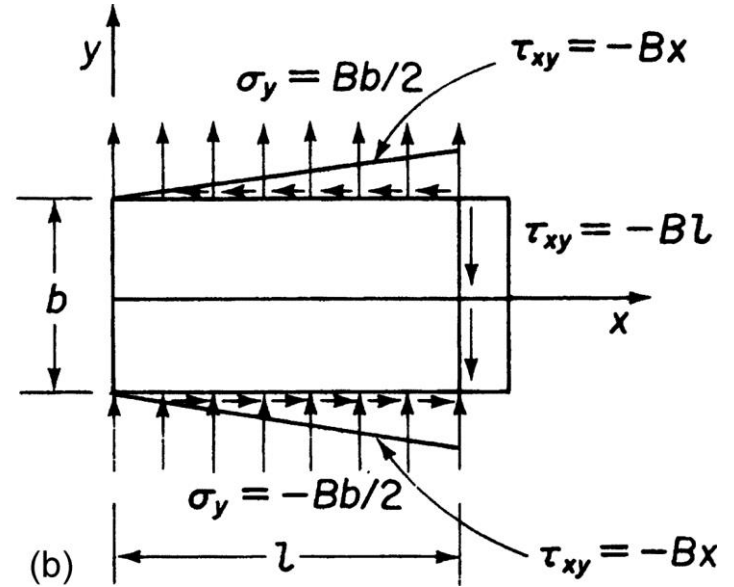


FIGURE 2.1 Required Loading Conditions on Rectangular Sheet in Example 2.1



(a)



(b)

FIGURE 2.2 (a) Required Loading Conditions on Rectangular Sheet in Example 2.2 for $A = B = C = 0$; (b) as in (a) but $A = C = D = 0$

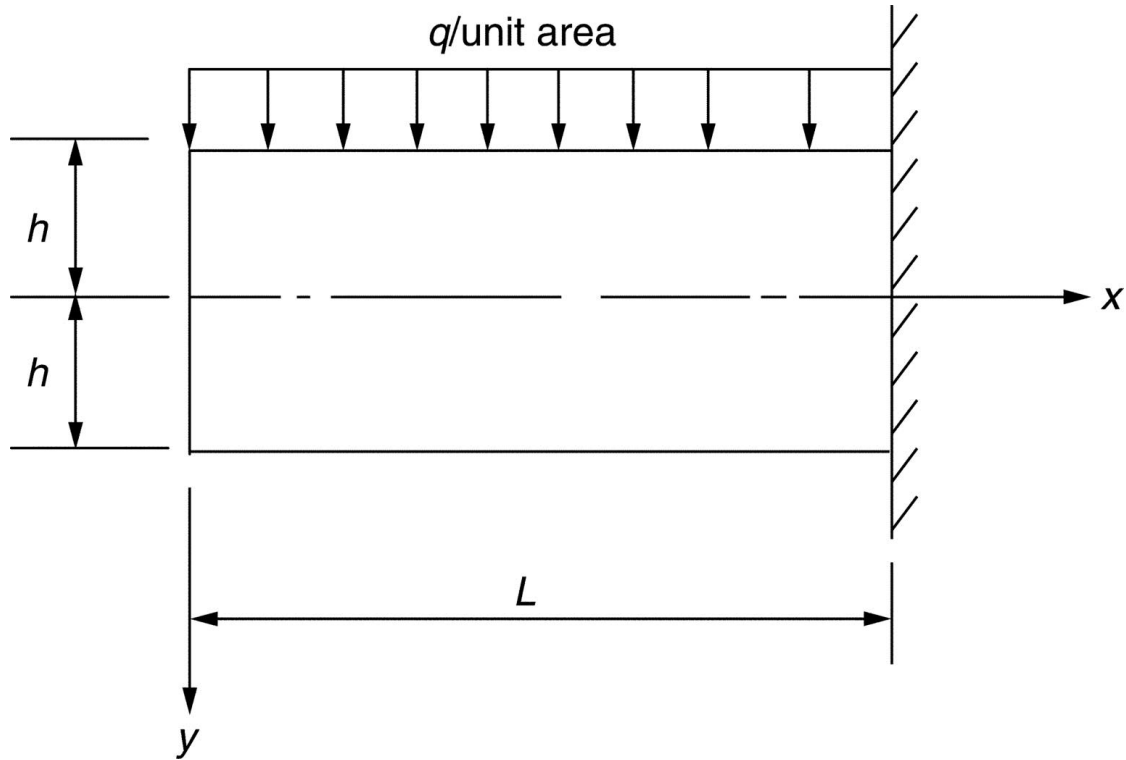


FIGURE 2.3 Beam of Example 2.3

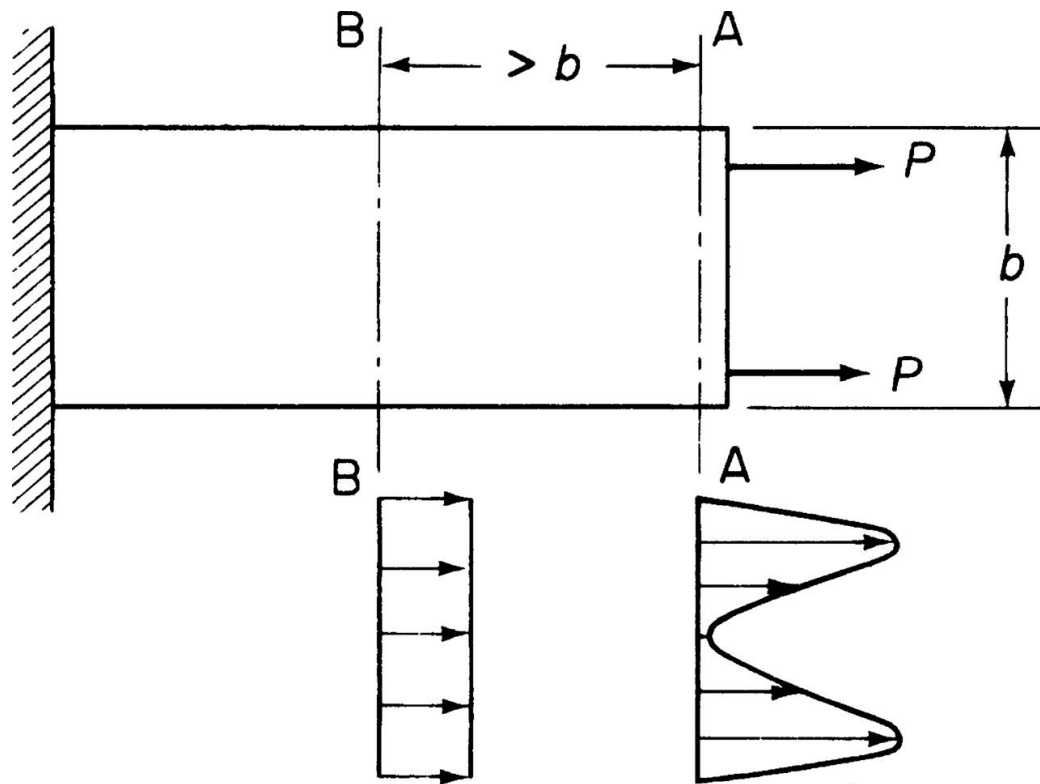


FIGURE 2.4 Stress Distributions Illustrating St. Venant's Principle

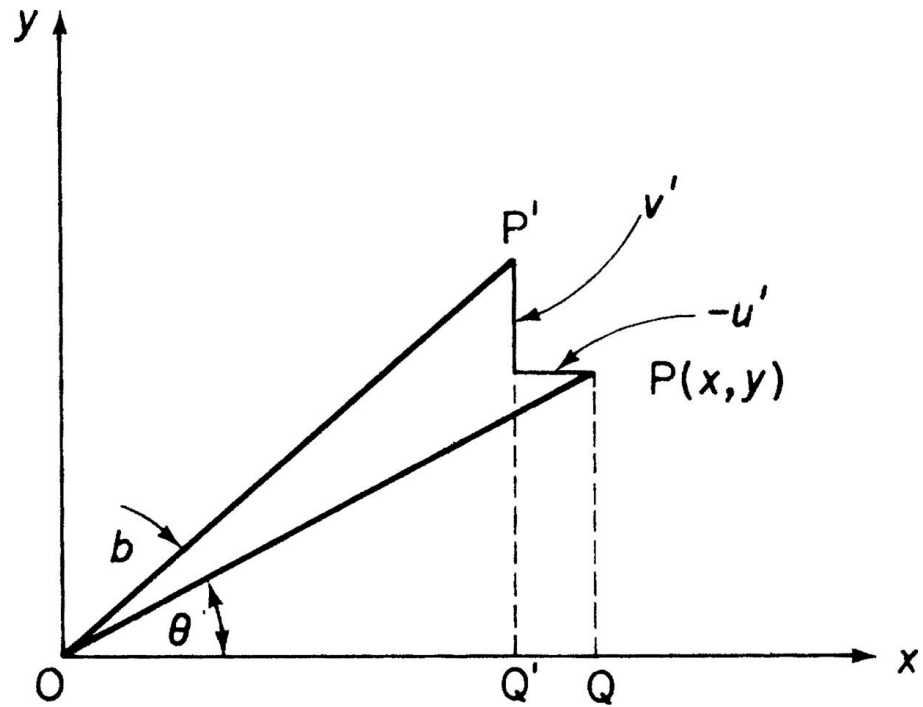


FIGURE 2.5 Displacements Produced by Rigid Body Rotation

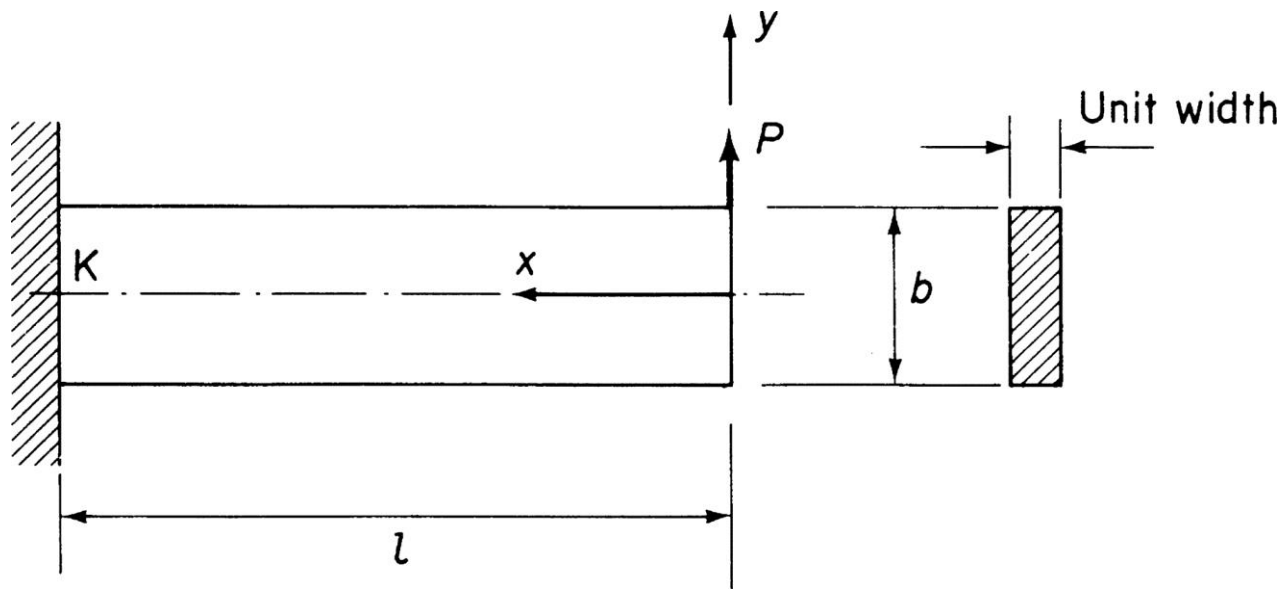


FIGURE 2.6 Bending of an End-Loaded Cantilever

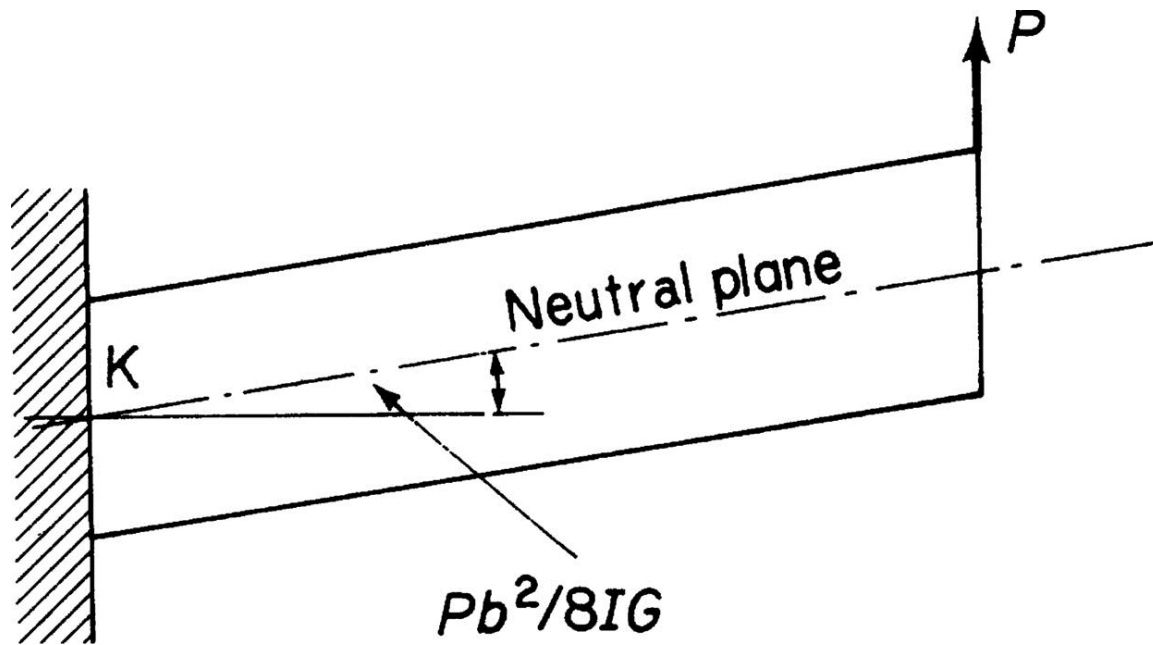


FIGURE 2.7 Rotation of Neutral Plane Due to Shear in an End-Loaded Cantilever

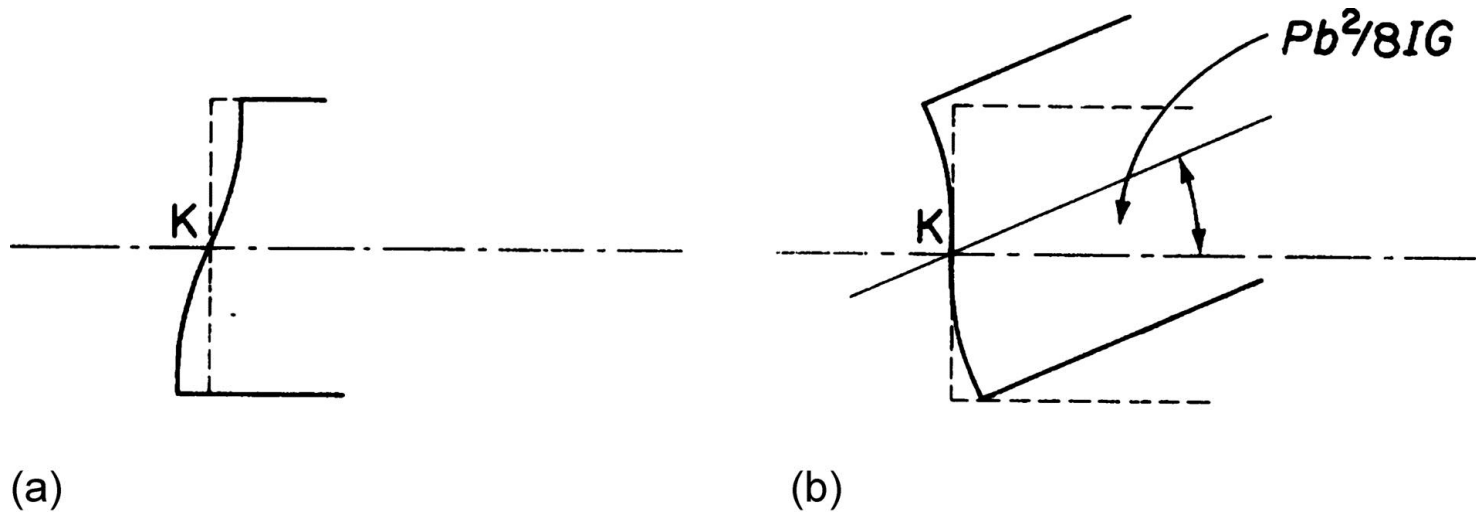


FIGURE 2.8 (a) Distortion of the Cross-section Due to Shear; (b) Effect on Distortion of the Rotation Due to Shear

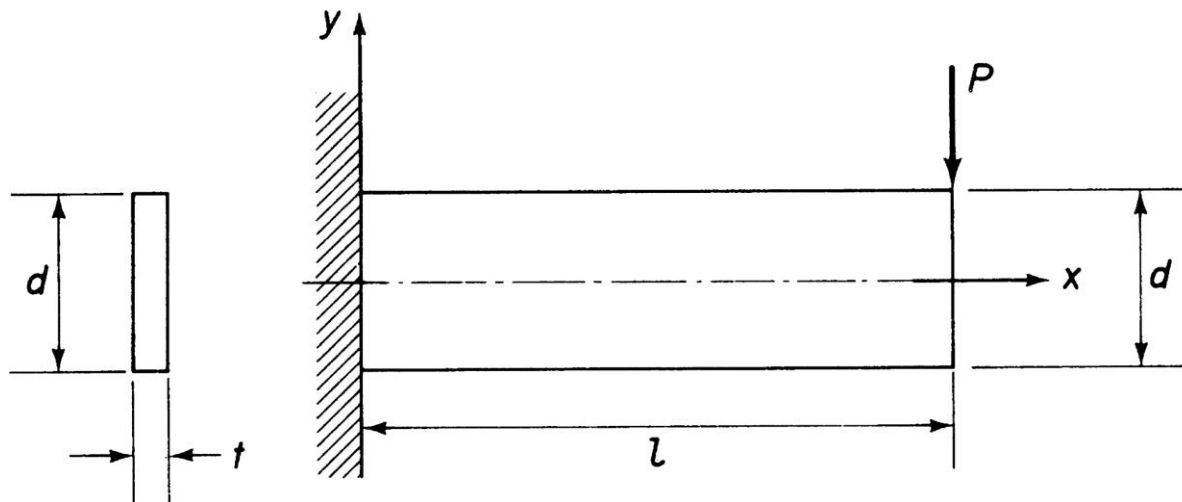


FIGURE P.2.2

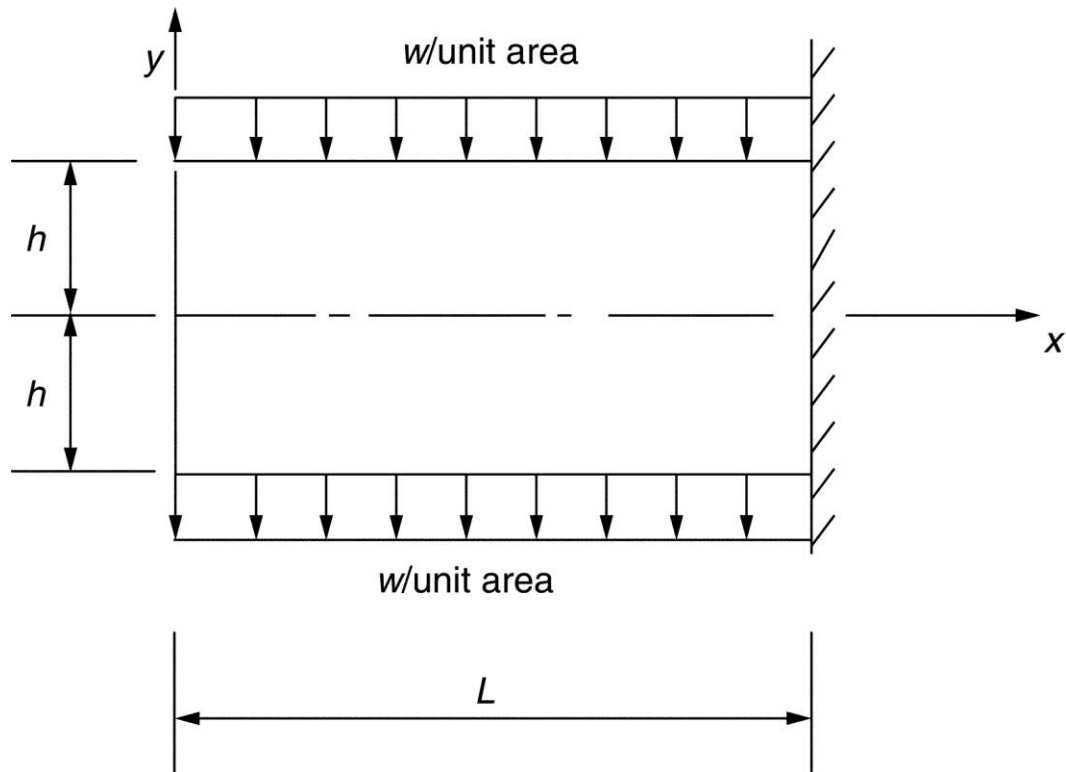


FIGURE P.2.3

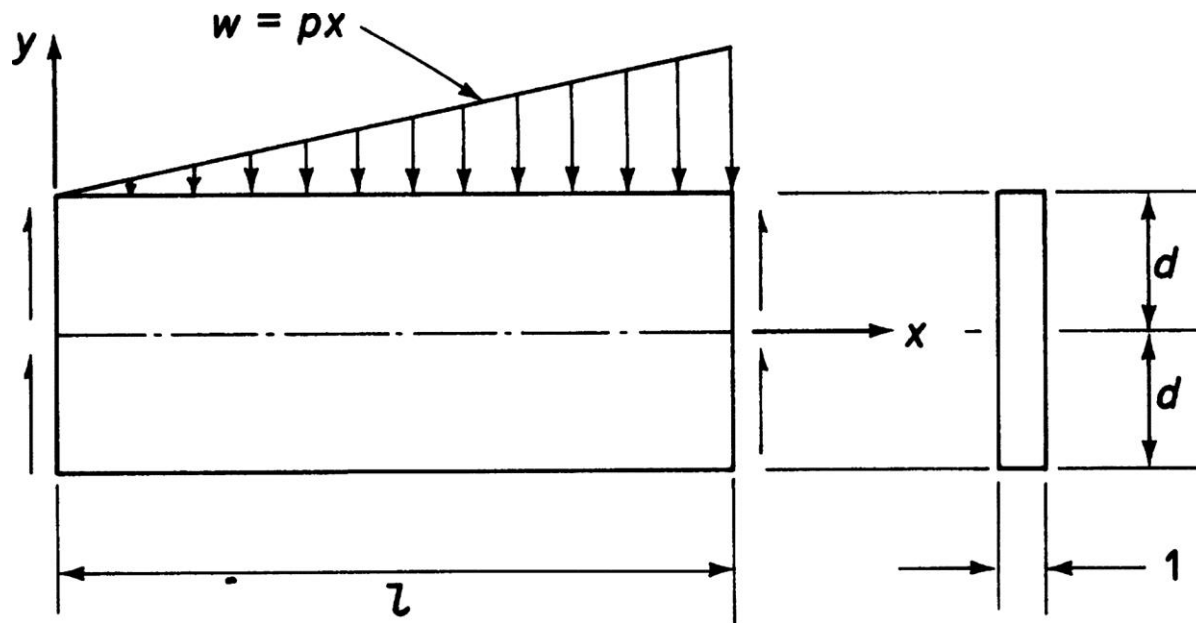


FIGURE P.2.4

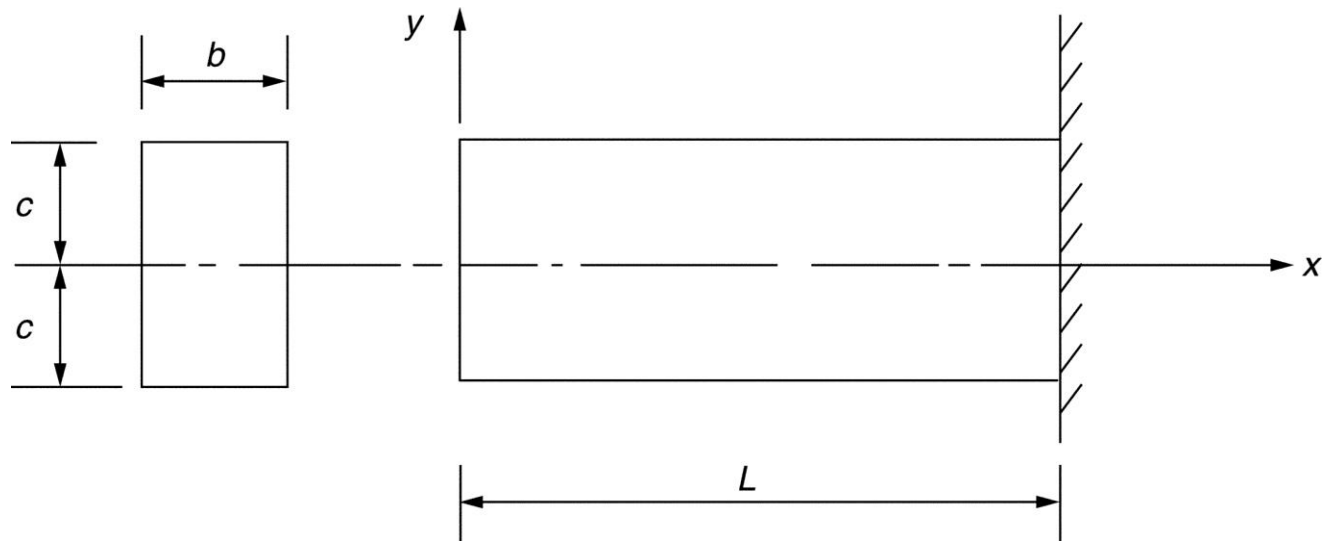


FIGURE P.2.5