1. Determine the reactions at the supports, then draw the shear and moment diagrams. *EI* is constant.
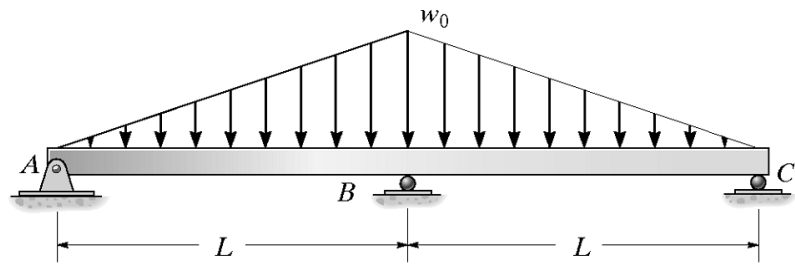
2. The beam has a constant E_1I_1 and is supported by the fixed wall at B and the rod AC. If the rod has a cross-sectional area A_2 and the material has a modulus of elasticity E_2, determine the force in the rod.
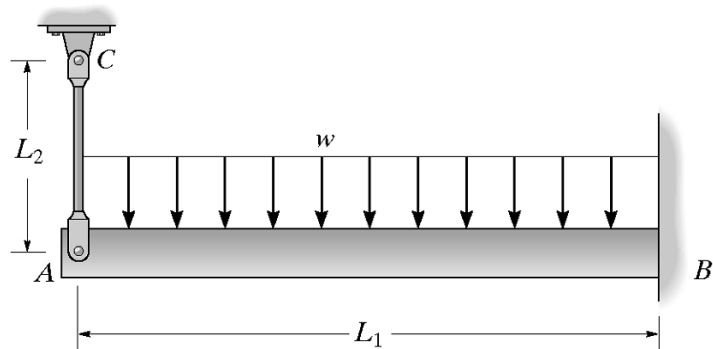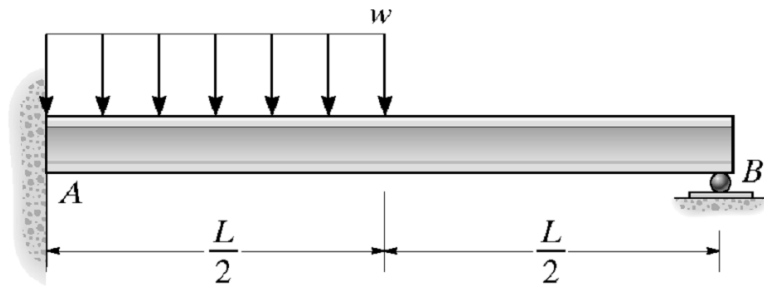
3. Determine the reactions at the supports A and B. EI is constant.

4. The beam is supported by a pin at A, a spring having a stiffness k at B, and a roller at C. Determine the force the spring exerts on the beam. EI is constant.