Quiz07 – 9:30 class Q1 (conceptual problem 11.5)



This simply-supported beam is DETERMINATE. External reactions and internal resultants are found directly from equilibrium considerations. Therefore, material properties are not needed to solve for stresses. Deflections do depend on material properties.

Q2 (conceptual problem 11.4)



This beam is INDETERMINATE. External reactions and internal resultants are found from both equilibrium considerations and integration of the beam deflection equations, where the latter requires information on the material properties. Therefore, material properties are needed to solve for stresses. Deflections do depend on material properties.