

ME 260: Structural Optimization: Size, Shape, and Topology

Assigned: Sep. 15, 2026

In-class quiz 10 (10 mins)

Due: Sep. 15, 2026

Name:

$$\min_{y(x)} J = \int_{x_1}^{x_2} (y^2 y' + y' y''' + y''^2) dx$$

Write the differential equation and boundary conditions to solve for $y(x)$.