

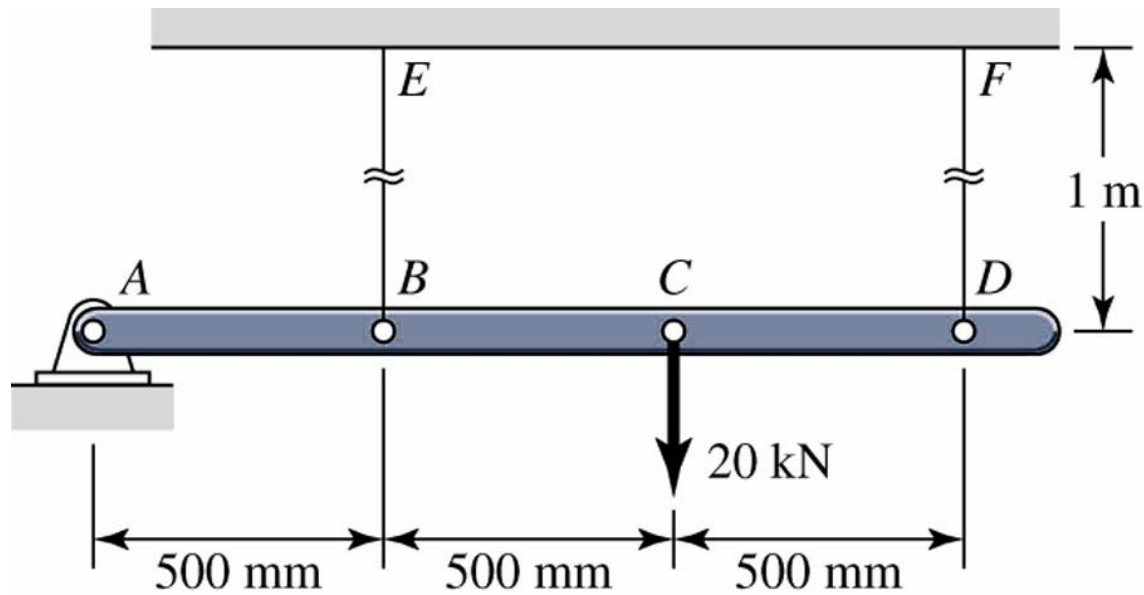
ME 1028 (06-1)

HW#7

Due on Monday, Nov. 7th

Name

- (1) The steel beam ABCD shown in simply support at A and supported at B and D by steel cables, each having diameter of 12–mm. The moment of inertia of the beam is $I = 8(10^5) \text{ mm}^4$. A force of 20–kN is applied at point C. For steel, let $E = 209 \text{ GPa}$. Determine the stresses in the cables and the deflections of B, C, and D



- (2) Determine the reactions at the roller support B of the beam shown in figure below. Use the method of superposition and the deflection formulas of the beams from Tables

