

**Birzeit University**  
**Faculty of Engineering**  
**Department of Civil and Environmental Engineering**

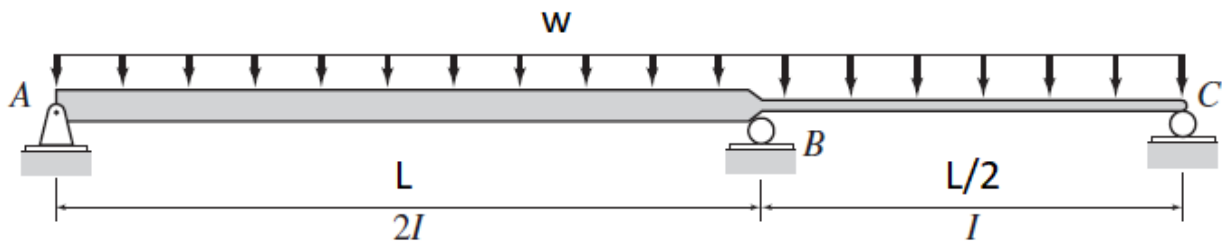
**ENCE 3331, Structural Analysis I**

**Homework assignment #8**

**Due on Thursday, May 21<sup>st</sup>, 2020 @ 8:30 AM.**

**Question 1: Using force method,** Calculate the reactions at A, B, and C, and draw shear and moment diagrams for the following beam, given that  $L=5\text{m}$  and  $w=50\text{ kN/m}$ . ( $E = \text{constant}$ )

(Bonus +50: Find deflection at the middle of span AB)



**Question 2: Using force method,** Calculate the reactions at A, and B, and draw axial, shear, and moment diagrams for the following frame. ( $AC, BE \rightarrow 2I, CE \rightarrow I$ )

