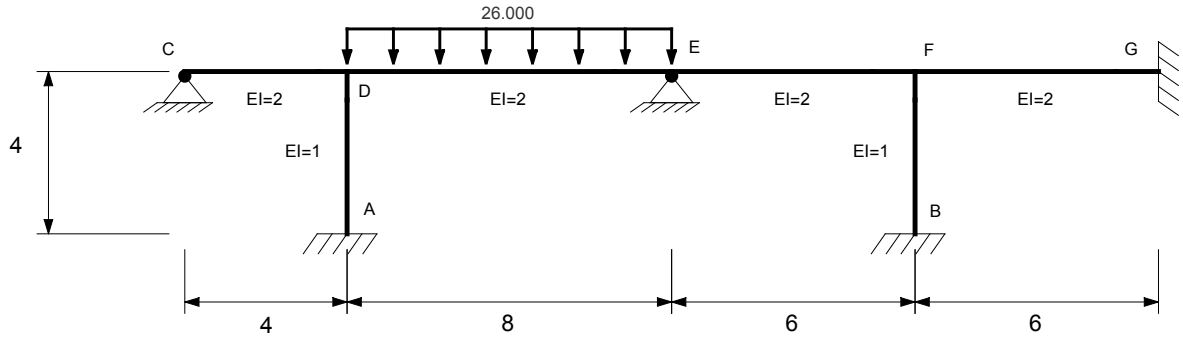
Problem 1

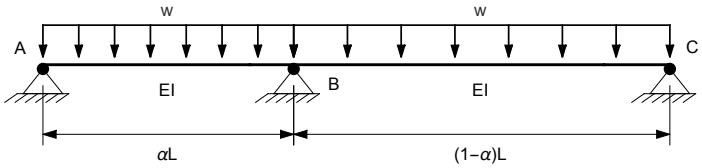
Problem statement



a) Sketch the deflected shape marking all locations of inflection points.

b) Sketch the moment diagram for all the frame members.

Problem 2



The total length of the two-span beam is “L” (αL + (1-α)L = L).

How do the following bending moments vary with α for $0 \le \alpha \le 1/2$:

a) Maximum positive moment in AB

b) Negative moment at B