1. Calculate the collapse load for the given beam structure. Sketch the bending moment diagram for the collapse mechanism and label the important (support and load point) moment magnitudes.

\[ M_p = \text{constant} \]
\[ qL = P \]

2. Calculate the collapse load for the given beam structure. Sketch the bending moment diagram for the collapse mechanism and label the important moment magnitudes.

\[ \text{Span AB} = M_p \]
\[ \text{Span BC} = 2M_p \]