MOST UNFAVOURABLE POSITION OF THE LOAD

All elements EI and M_p
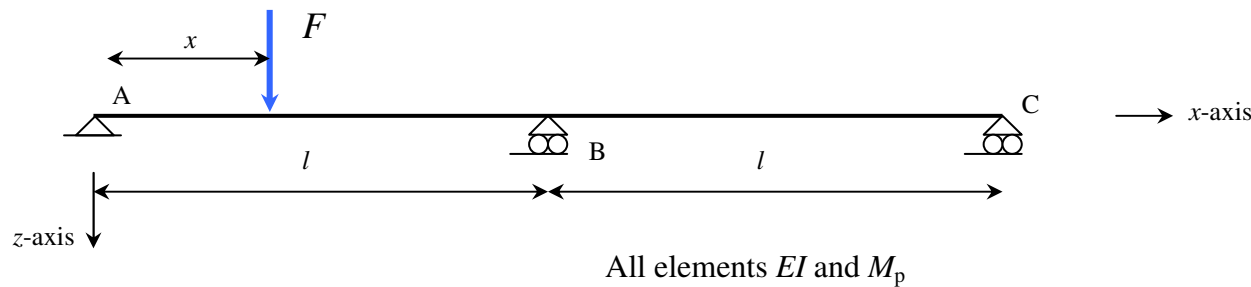
Question:
- Find the collapse load F_p and its point of application x
- Find the redundancy in the load carrying capacity on a structural level indicated by the factor $\beta = \dfrac{F_p}{F_e}$ for a shape factor $\alpha = 1,0$

Answer
$F_p = 5.828\ M_p/l$
$\beta = 1.209$