

Fixed End Moments

$(FEM)_{AB} = \frac{PL}{8}$
 $(FEM)_{BA} = \frac{PL}{8}$

$(FEM)'_{AB} = \frac{3PL}{16}$

$(FEM)_{AB} = \frac{Pb^2a}{L^2}$
 $(FEM)_{BA} = \frac{Pa^2b}{L^2}$

$(FEM)'_{AB} = \left(\frac{P}{L^2}\right)(b^2a + \frac{a^2b}{2})$

$(FEM)_{AB} = \frac{2PL}{9}$
 $(FEM)_{BA} = \frac{2PL}{9}$

$(FEM)'_{AB} = \frac{PL}{3}$

$(FEM)_{AB} = \frac{5PL}{16}$
 $(FEM)_{BA} = \frac{5PL}{16}$

$(FEM)'_{AB} = \frac{45PL}{96}$

$(FEM)_{AB} = \frac{wL^2}{12}$
 $(FEM)_{BA} = \frac{wL^2}{12}$

$(FEM)'_{AB} = \frac{wL^2}{8}$

$(FEM)_{AB} = \frac{11wL^2}{192}$
 $(FEM)_{BA} = \frac{5wL^2}{192}$

$(FEM)'_{AB} = \frac{9wL^2}{128}$

$(FEM)_{AB} = \frac{wL^2}{20}$
 $(FEM)_{BA} = \frac{wL^2}{30}$

$(FEM)'_{AB} = \frac{wL^2}{15}$

$(FEM)_{AB} = \frac{5wL^2}{96}$
 $(FEM)_{BA} = \frac{5wL^2}{96}$

$(FEM)'_{AB} = \frac{5wL^2}{64}$

$(FEM)_{AB} = \frac{6EI\Delta}{L^2}$
 $(FEM)_{BA} = \frac{6EI\Delta}{L^2}$

$(FEM)'_{AB} = \frac{3EI\Delta}{L^2}$