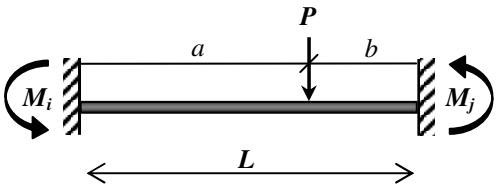
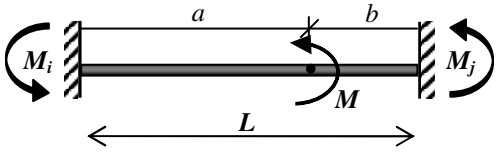
HANDOUT #2

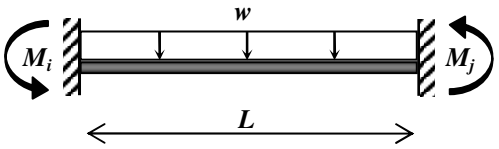
Fixed End Moments



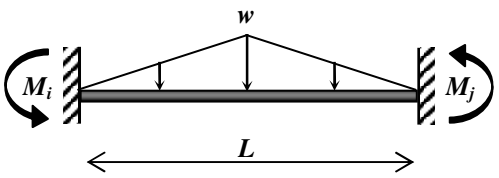
$$M_i = \frac{Pab^2}{L^2} \qquad M_j = -\frac{Pa^2b}{L^2}$$



$$M_i = \frac{Mb}{L^2}(2a-b) \qquad M_j = \frac{Ma}{L^2}(2b-a)$$

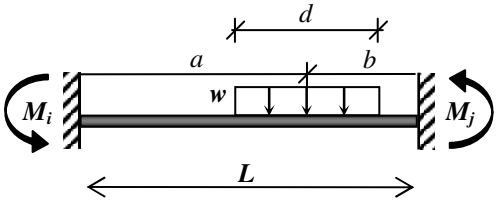


$$M_i = \frac{wL^2}{12} \qquad M_j = -\frac{wL^2}{12}$$



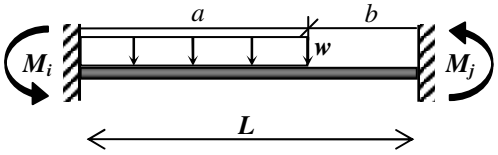
$$M_i = \frac{5wL^2}{96} \qquad M_j = -\frac{5wL^2}{96}$$

Fixed End Moments



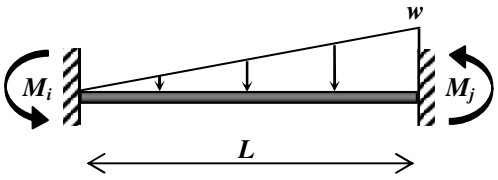
$$M_i = \frac{wd}{L^2}\left(ab^2 + \frac{(a-2b)}{12}d^2\right)$$

$$M_j = -\frac{wd}{L^2}\left(a^2b + \frac{(b-2a)}{12}d^2\right)$$

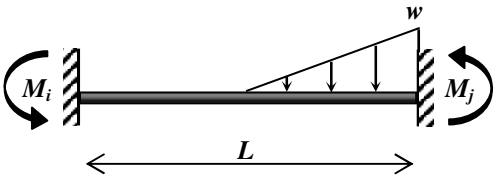


$$M_i = \frac{wa^2}{12L^2}\left(6L^2 - 8aL + 3a^2\right)$$

$$M_j = -\frac{wa^3}{12L^2}\left(4L - 3a\right)$$



$$M_i = \frac{wL^2}{30} \qquad M_j = -\frac{wL^2}{20}$$



$$M_i = \frac{7wL^2}{960} \qquad M_j = -\frac{23wL^2}{960}$$