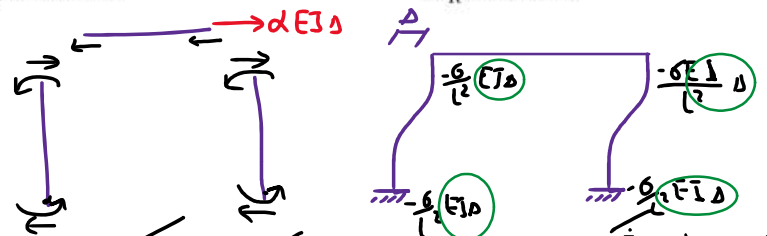
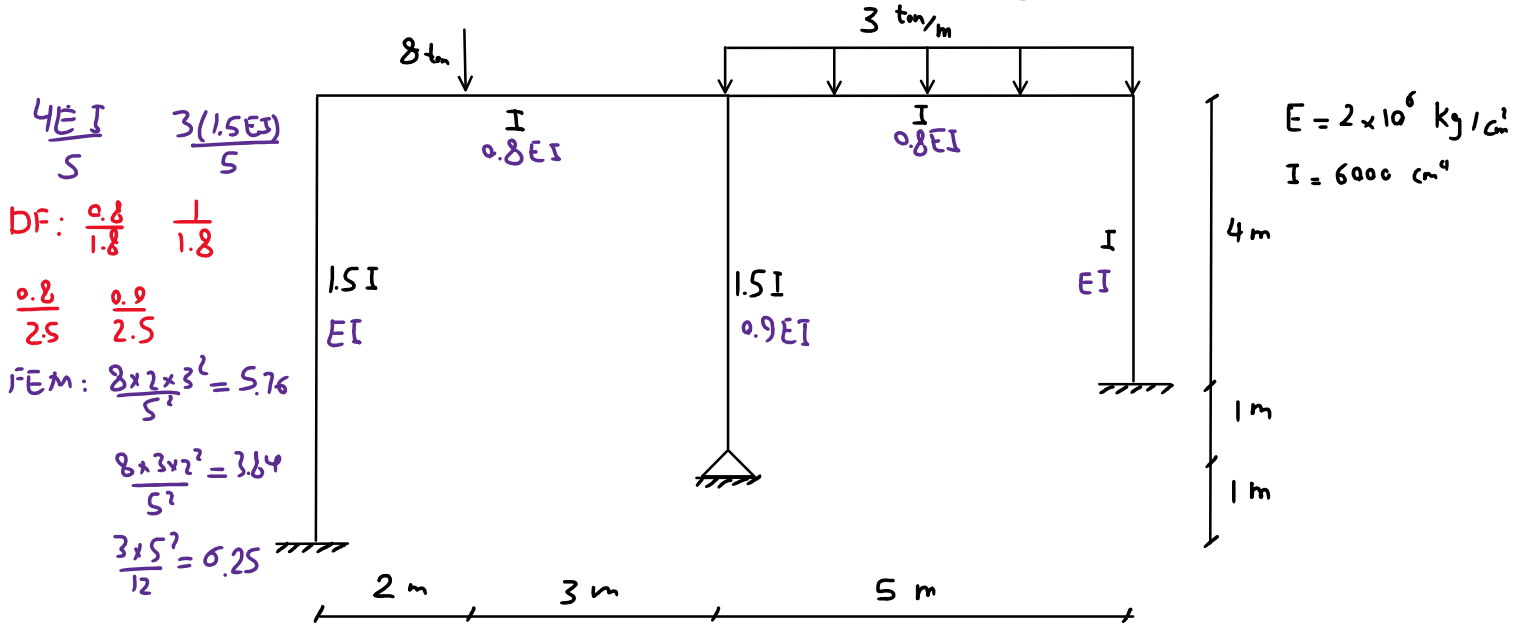


$$\alpha EI \Delta = R \rightarrow EI \Delta = \frac{R}{\alpha}$$

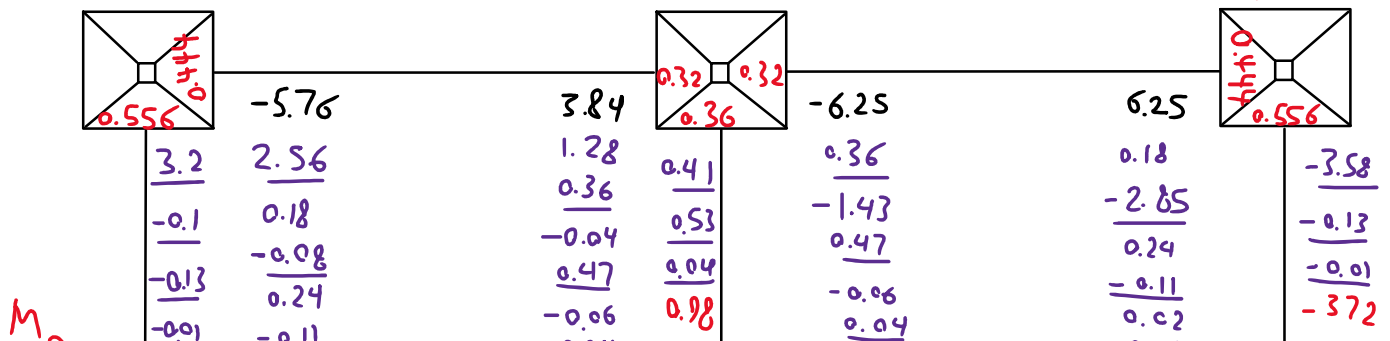
$$M = M_0 + M_R$$

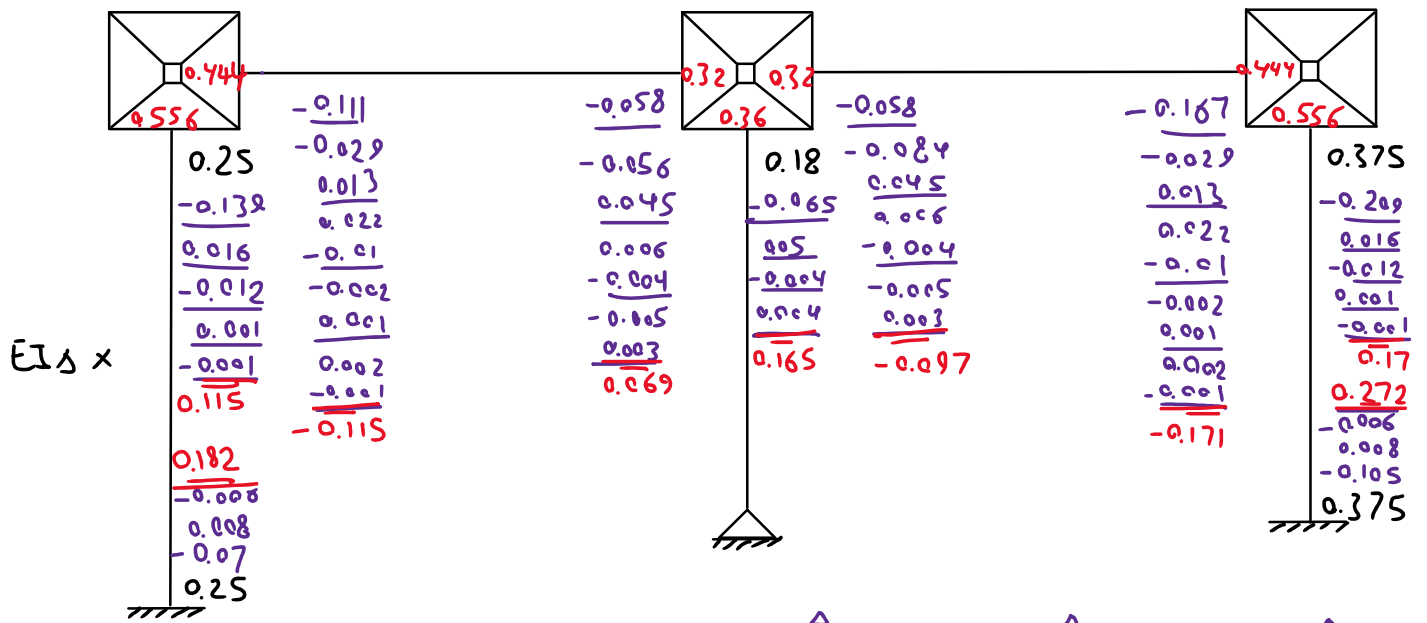
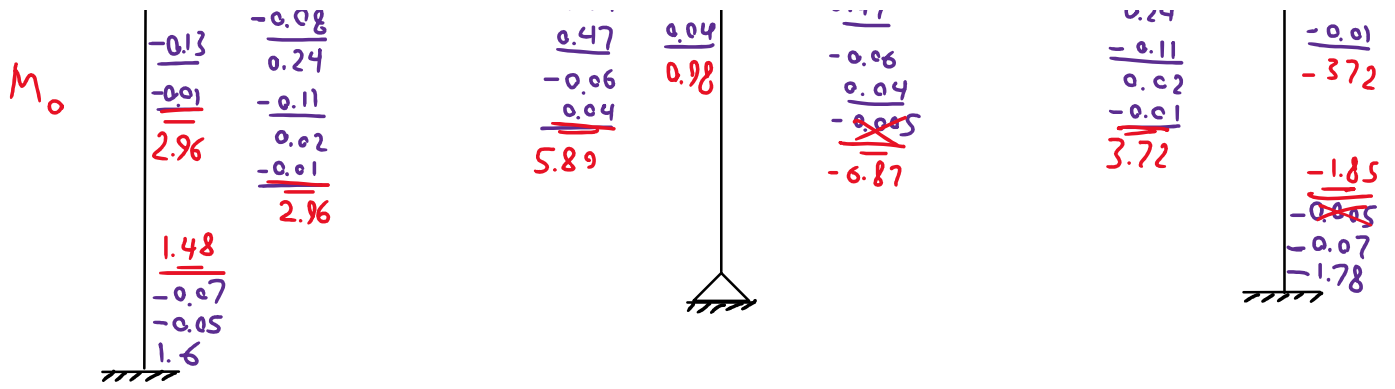


مثال: قاب شکل زیر را به روش توزيع لنگر تحليل كنيد.



تحليل در اثر بار خدجي بدون Δ :

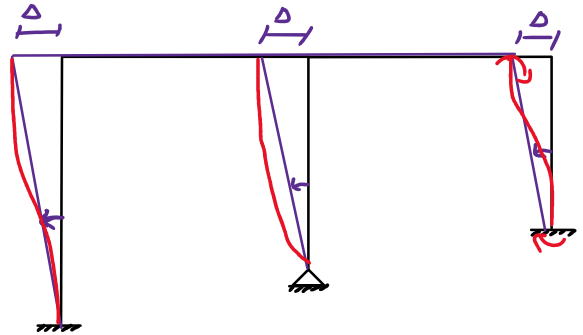




$$\frac{6(1.5EI)}{6^2} \Delta = 0.25 EI \Delta$$

$$\frac{3(1.5EI)}{5^2} \Delta = 0.18 EI \Delta$$

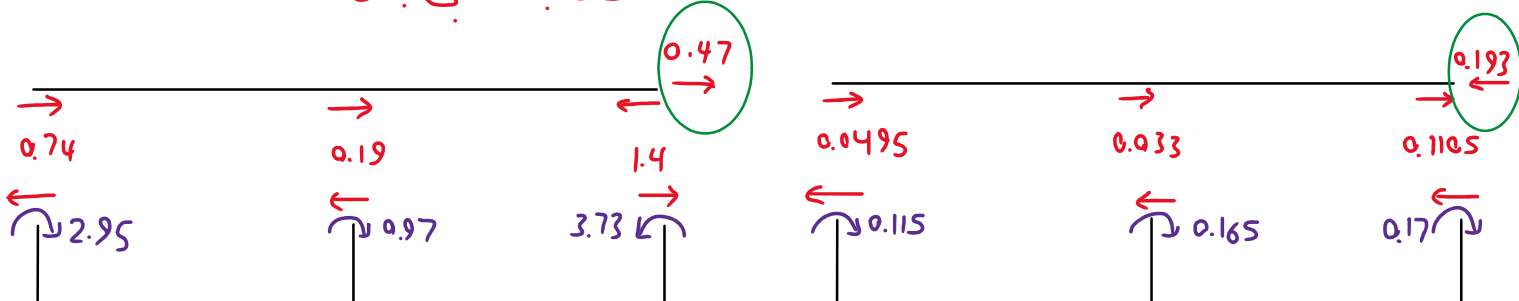
$$\frac{6(EI)}{4^2} \Delta = 0.375 EI \Delta$$

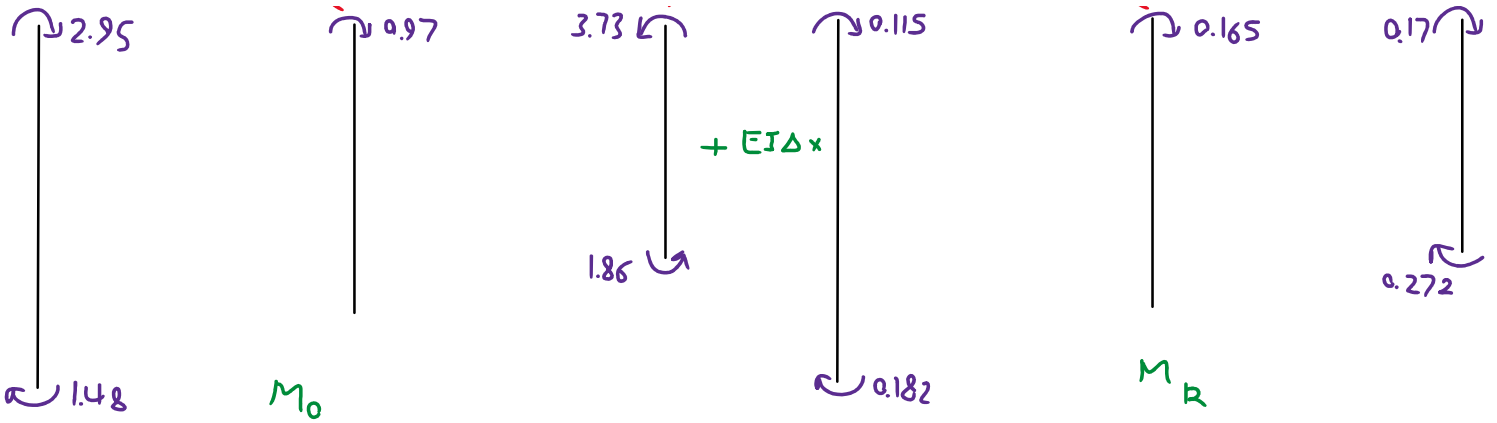


تحت بار خارجی بدون Δ

R

تحت Δ





$$0.193 EI \Delta = 0.47 \rightarrow \boxed{EI \Delta = 2.44}$$

$$EI = 2 \times 10^6 \text{ kg} \cdot \frac{\text{cm}^4}{\text{cm}^2} \times 6000 \text{ cm}^2 = 12 \times 10^9 \text{ kg} \cdot \text{cm}^2 = 1200 \text{ t} \cdot \text{m}^2 \rightarrow \Delta = \frac{2.44}{1200} = 0.002 \text{ m} = 2 \text{ mm}$$

کنڈوں کے لمبائی اعضا

