

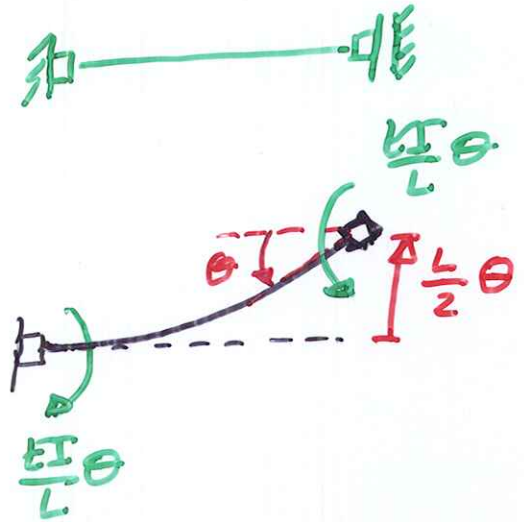
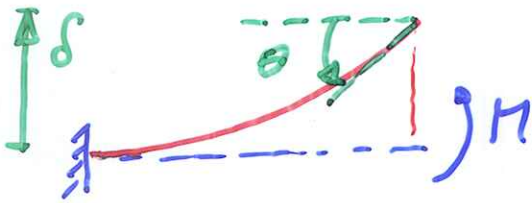
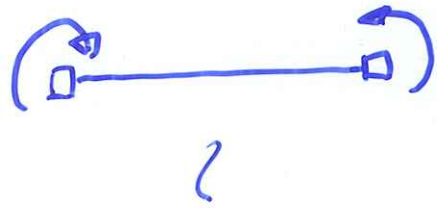
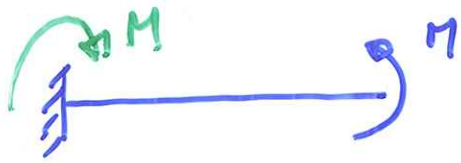
$$P = \frac{3EI}{L^3} \Delta$$

$$\Delta = \frac{PL^3}{3EI}$$

$$\theta = \frac{3}{2L} \left( \frac{PL^3}{3EI} \right) = \frac{PL^2}{2EI}$$

$$\delta = \frac{PL^3}{3EI}$$

$$\theta = \frac{PL^2}{2EI}$$



$$\frac{EI}{L}\theta = M \Rightarrow \theta = \frac{ML}{EI}$$

$$\delta = \frac{L}{2}(\theta) = \frac{L}{2}\left(\frac{ML}{EI}\right) = \frac{ML^2}{2EI}$$

$$\theta = \frac{ML}{EI}$$

$$\delta = \frac{ML^2}{2EI}$$