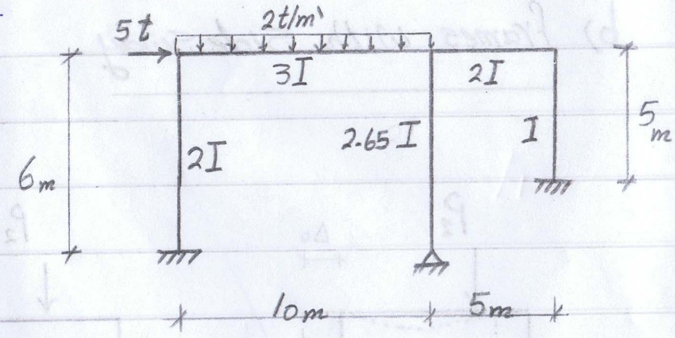
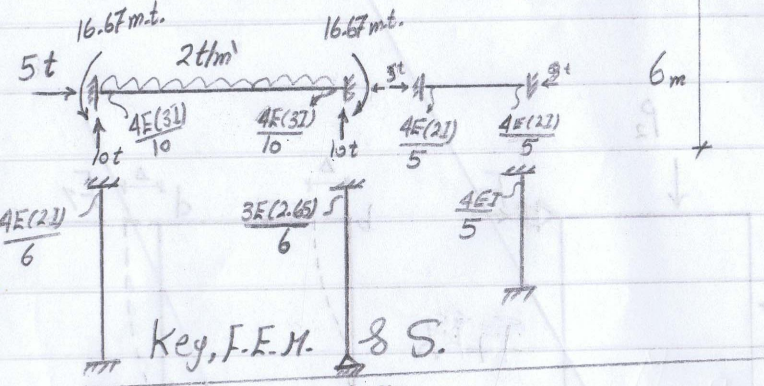
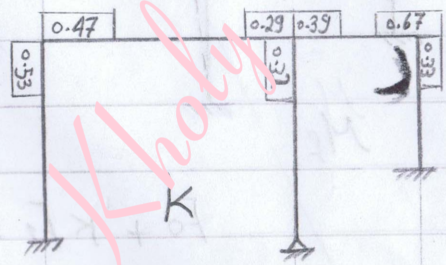
Example 10 "Sheet #2, Problem C"

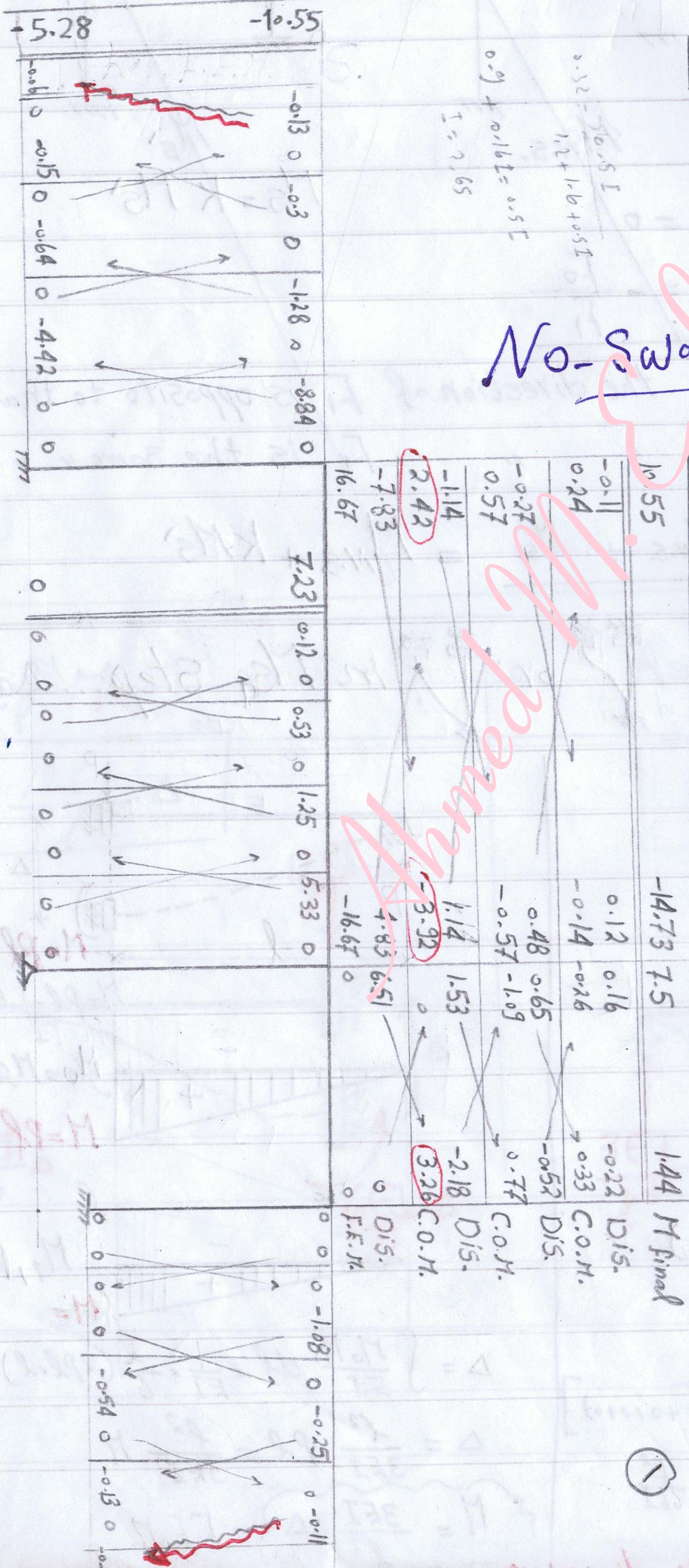


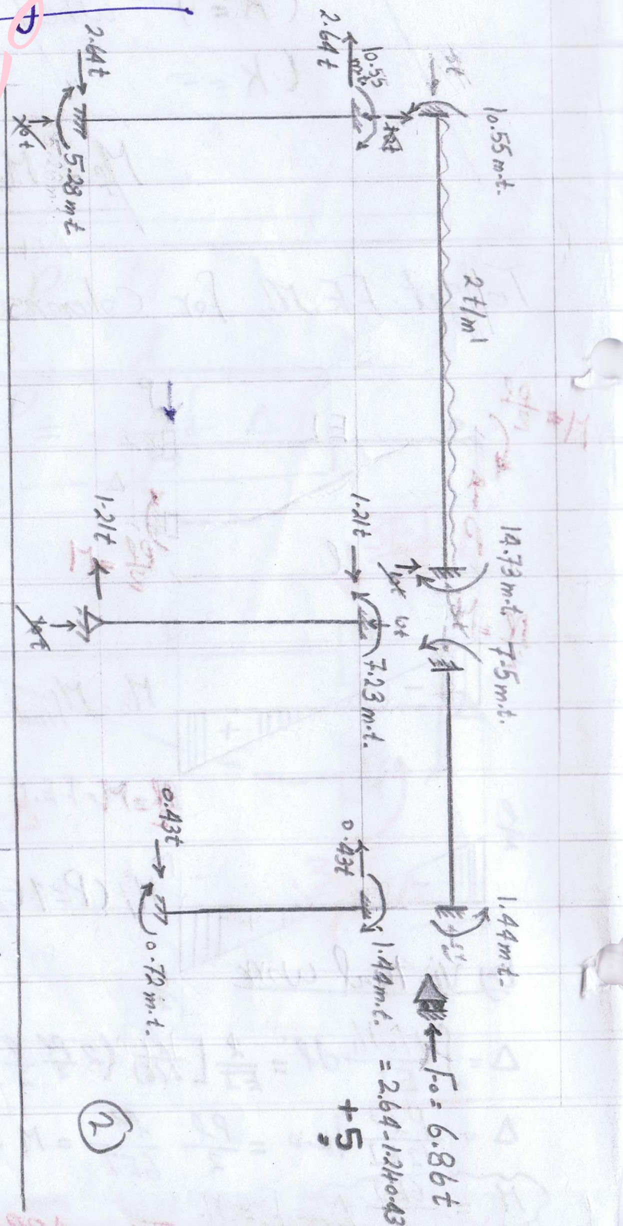
Problem

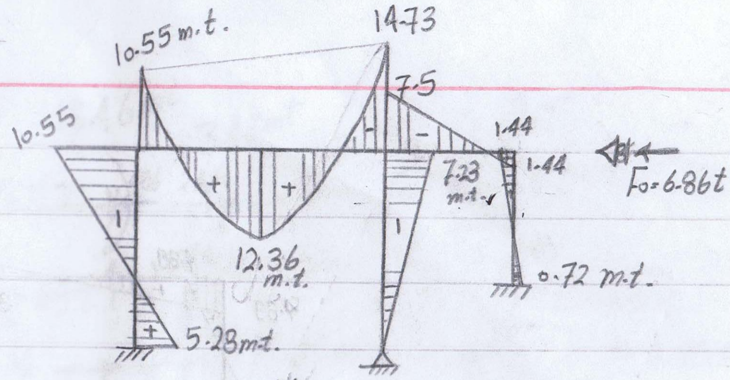




No-Sway Solution

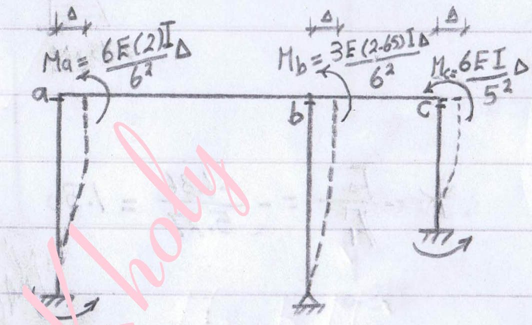






$M_{N.S.}$

Sway Correction

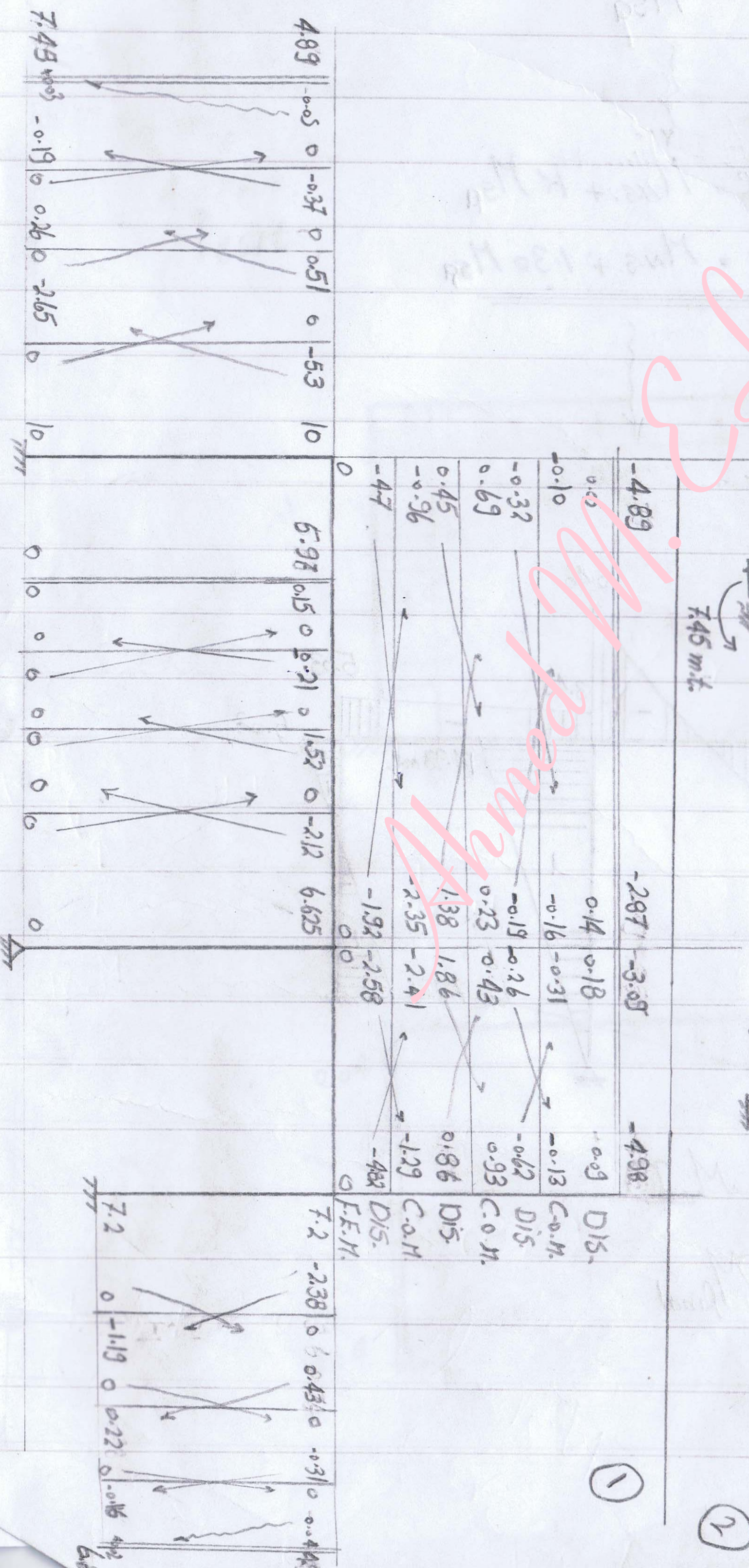


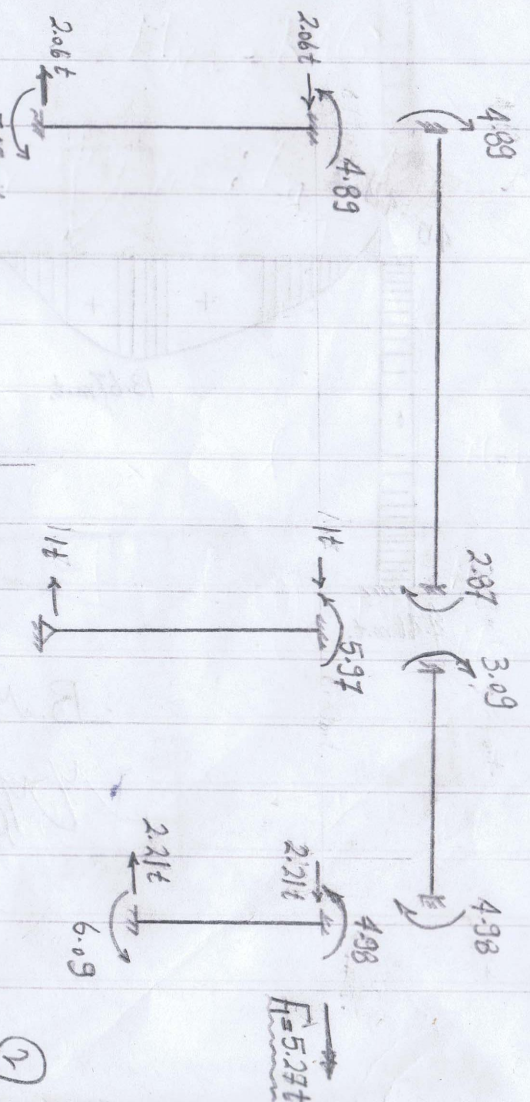
$\therefore M_a : M_b : M_c$

$= \frac{1}{3} : 0.2208 : 0.24 \times EI\Delta$

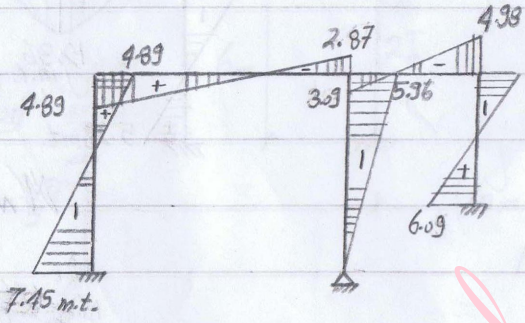
Assume $M_a = 10$ m.t.

$\therefore M_b = 6.625$ m.t., $M_c = 7.2$ m.t.





① ②



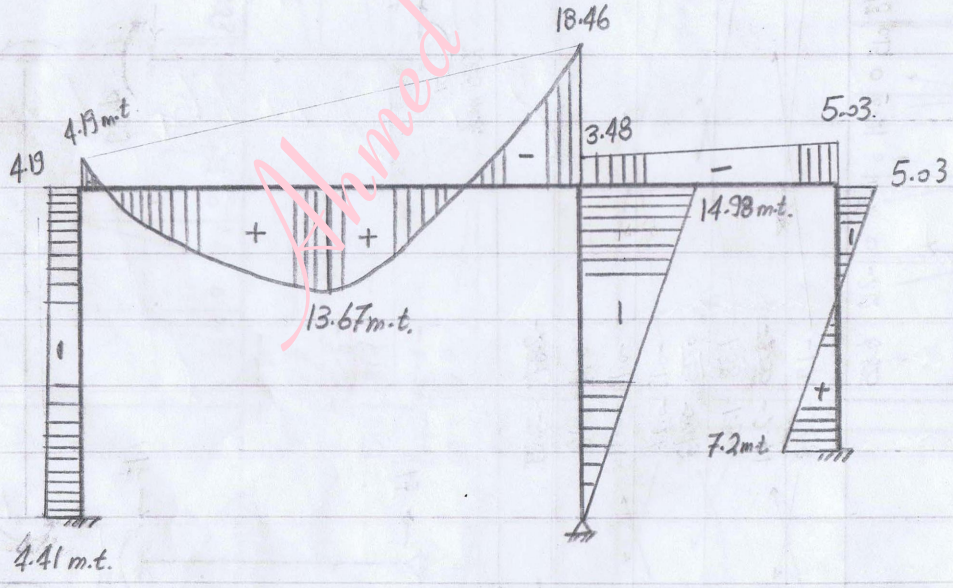
$F_1 = 5.27\,t$

M_{sq}

$$K = -\frac{F_o}{F_1} = -\frac{-6.86}{5.27} = 1.30$$

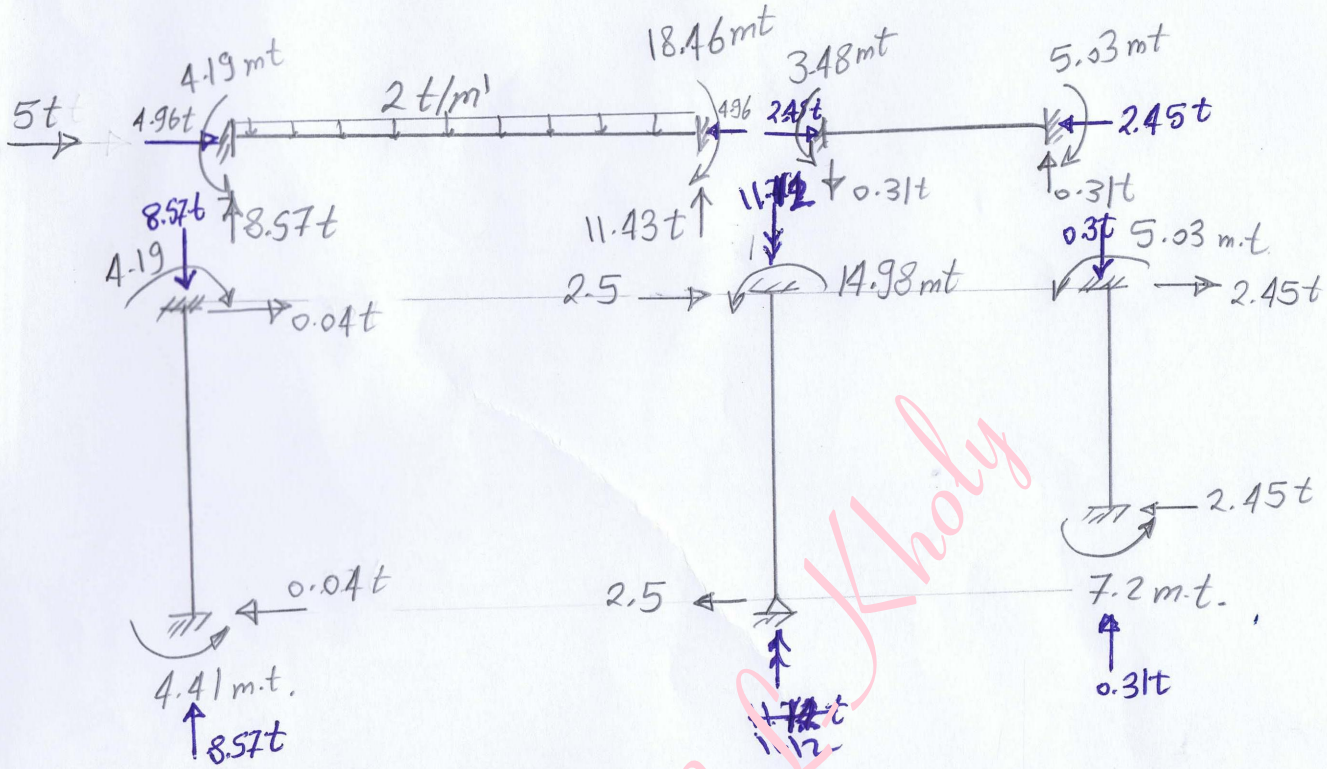
$$M_f = M_{N.S.} + K\,M_{sq}$$

$$M_f = M_{N.S.} + 1.30\,M_{sq}$$

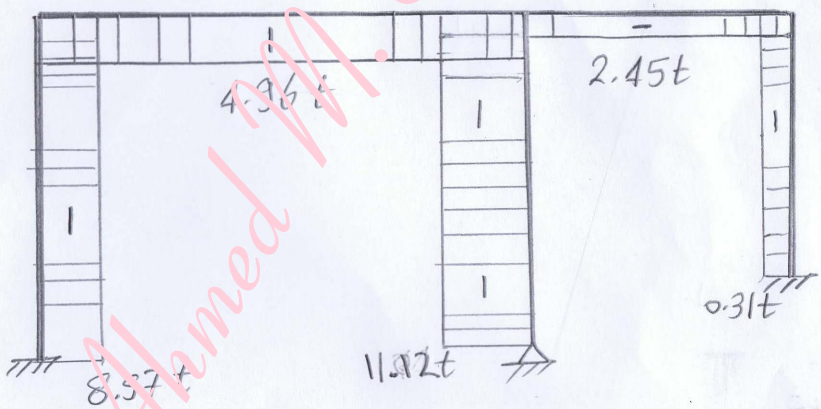


B.M.D

M_{final}



N.F.D.



S.F.D.