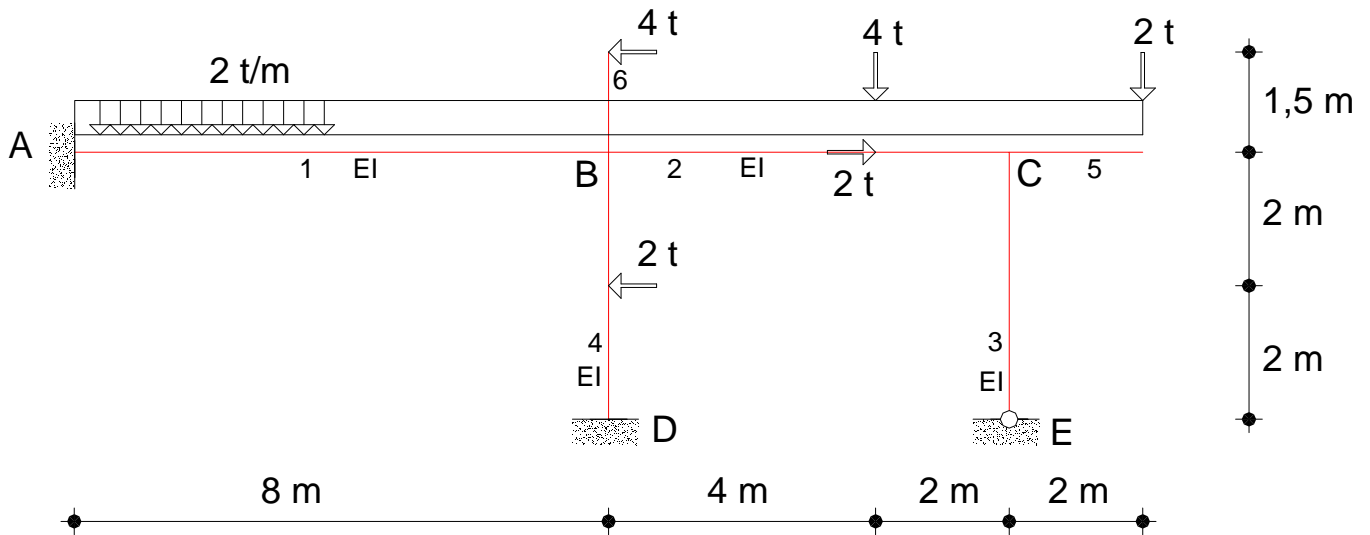
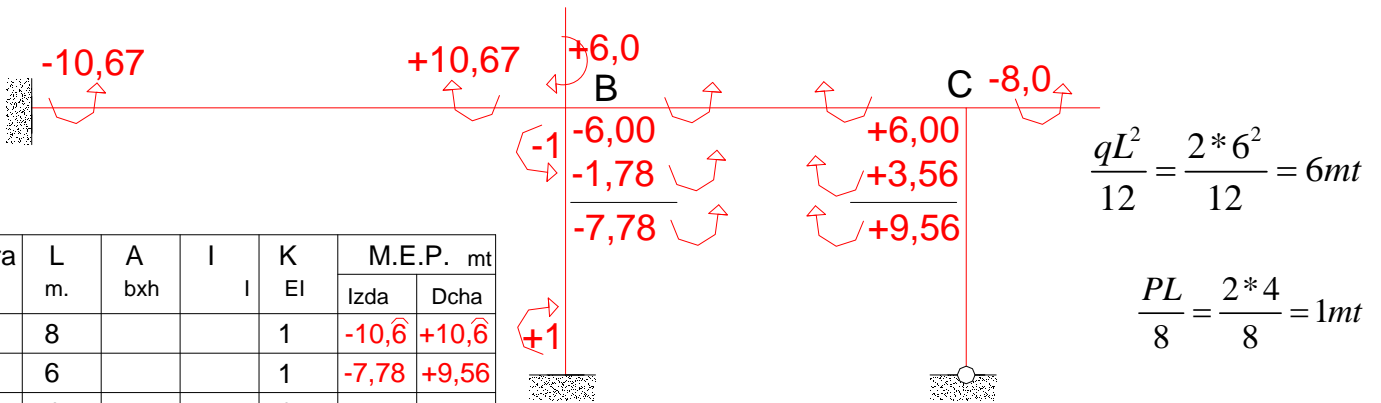


Ejercicio nº 4. Pórtico intraslacional por el método de Cross



ETAPA I: M.E.P. y factores de reparto.

$$\frac{qL^2}{12} = \frac{2 \cdot 8^2}{12} = 10,67 \text{ mt} \quad \frac{-Pab^2}{L^2} = \frac{4 \cdot 4 \cdot 2^2}{6^2} = -1,78 \text{ mt}$$



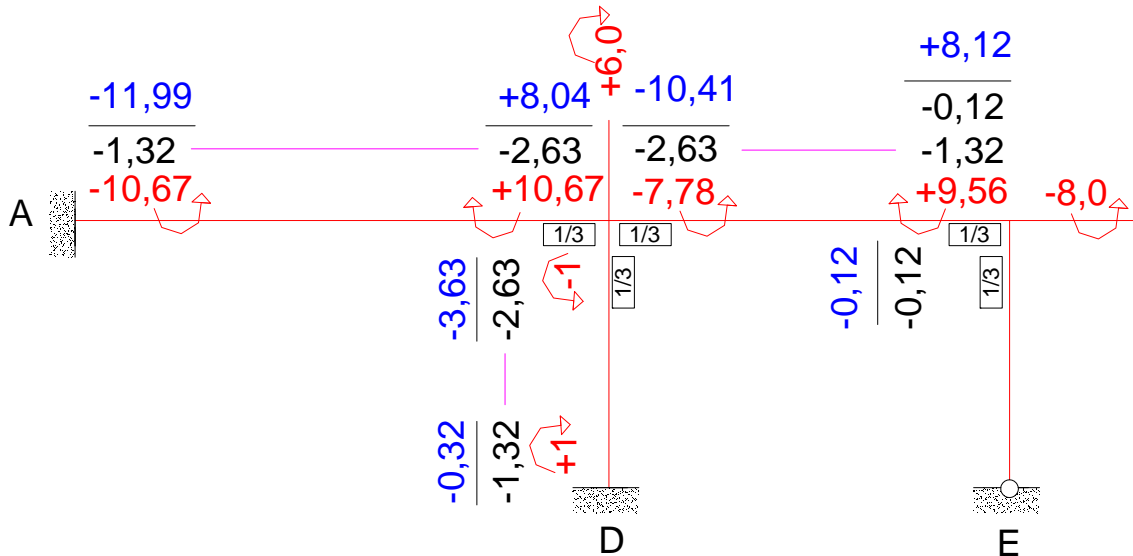
Barra nº	L m.	A b x h	I	K EI	M.E.P. mt	
					lzda	Dcha
1	8			1	-10,6	+10,6
2	6			1	-7,78	+9,56
3	4			1		
4	4			1	+1	-1

$$\frac{qL^2}{12} = \frac{2 \cdot 6^2}{12} = 6 \text{ mt}$$

$$\frac{PL}{8} = \frac{2 \cdot 4}{8} = 1 \text{ mt}$$

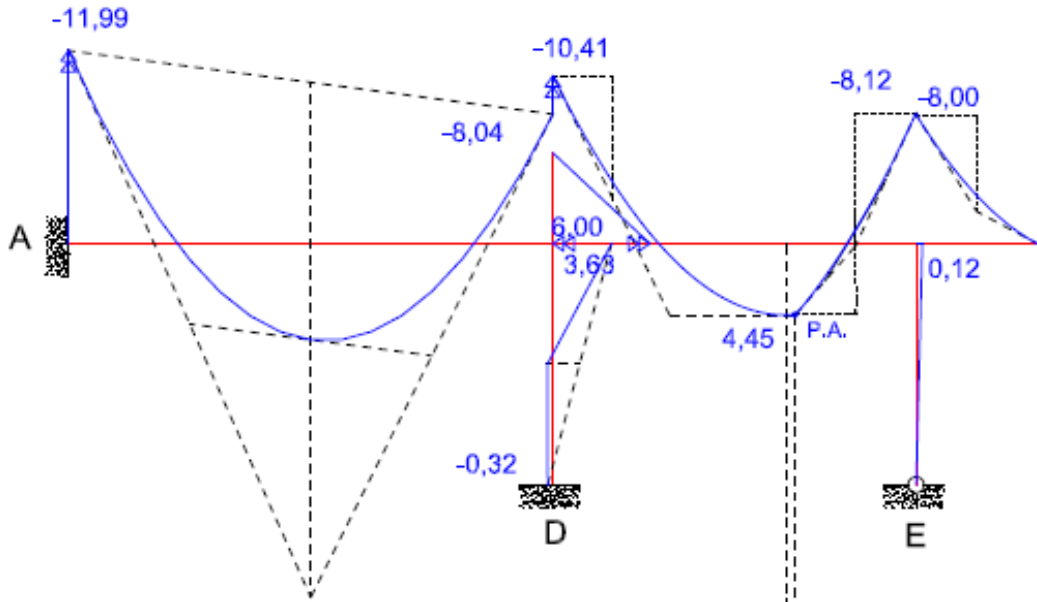
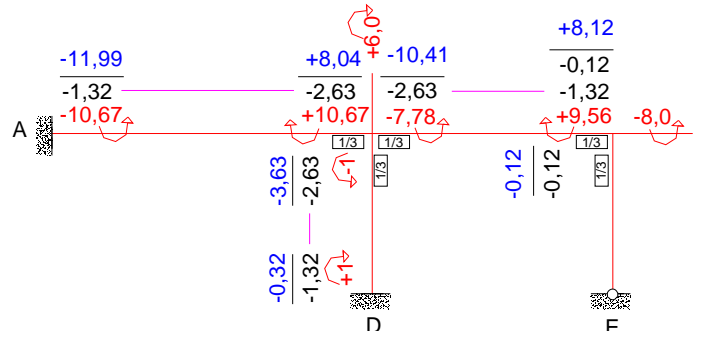
$$\frac{Pa^2b}{L^2} = \frac{4 \cdot 4^2 \cdot 2}{6^2} = 3,56 \text{ mt}$$

ETAPA II: Equilibrio de nudos. Se liberan los nudos uno a uno, se equilibra y transmite en su caso.

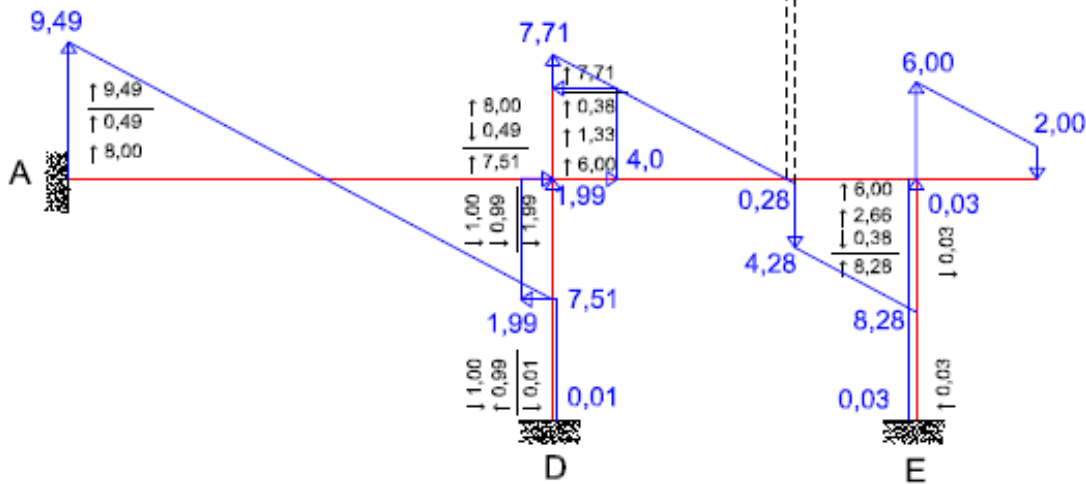


Ejercicio nº 4. Pórtico intraslacional (diagramas).

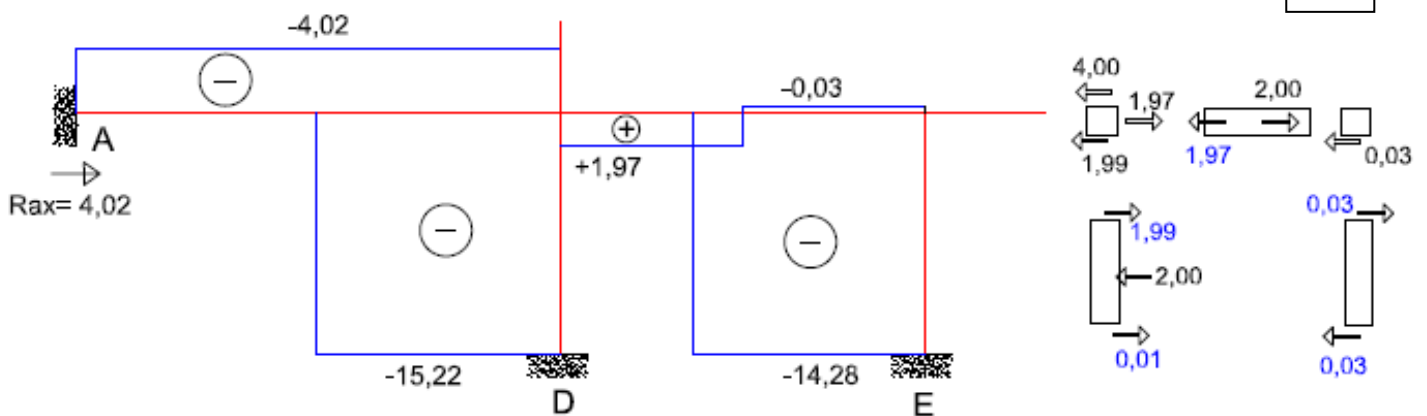
Momentos Flectores, Cortantes y Axiles



M.F.



V.



N.