

~~SIMONA
LI PUMA~~



~~ANGELO
LEONARDI~~

Carichi su Traveforma reticolare

13.8

7.8

2.9

2.25

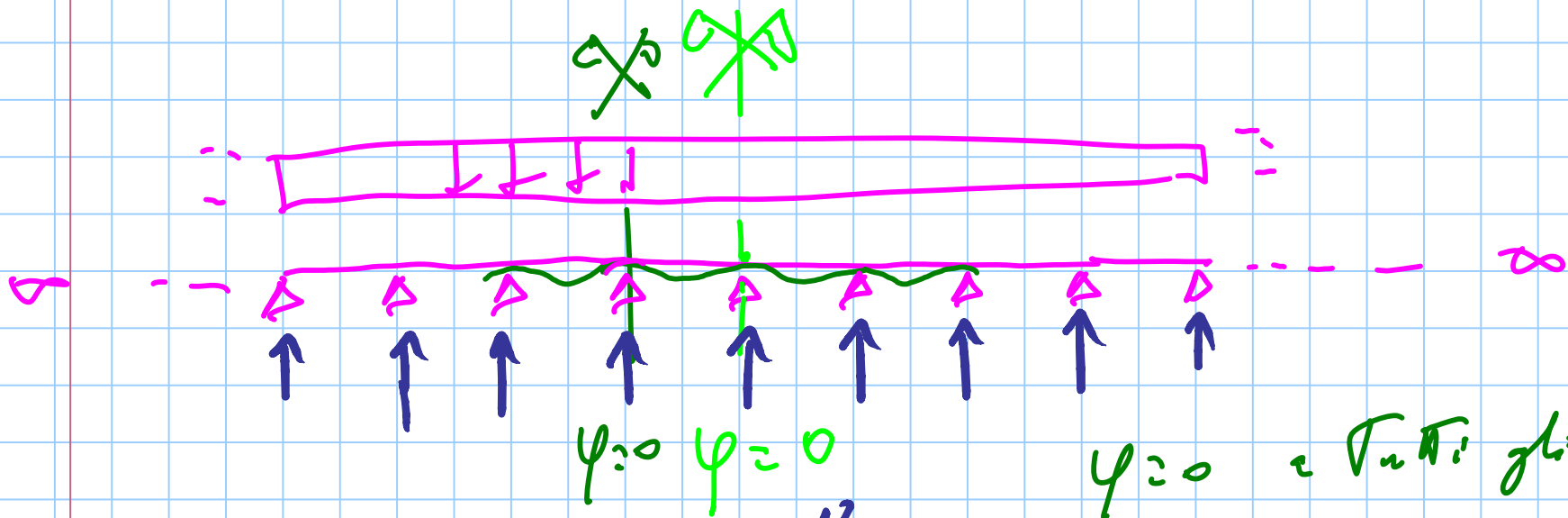
3.9

12.46

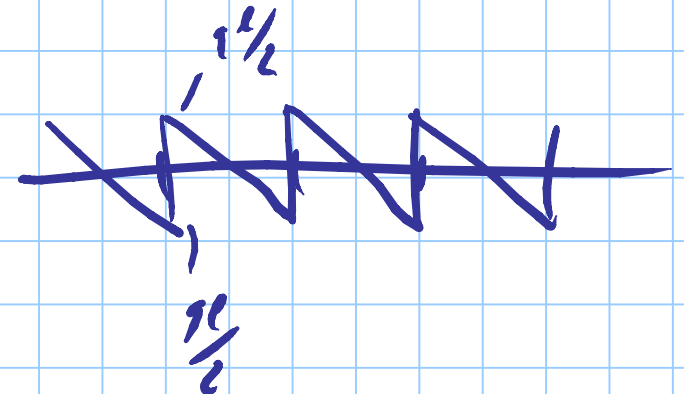
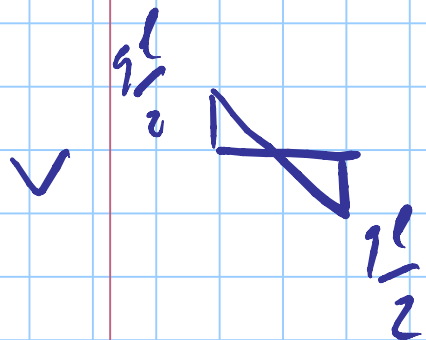
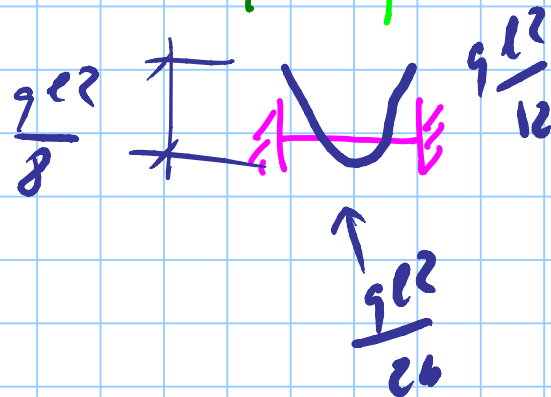
12.3

6.9

27.6



$\psi = 0$ $\approx \sqrt{\frac{2}{l}} \sin \frac{\pi x}{l}$ $g l$ $\approx p \cdot g l$



$$n_{\text{eff}} \approx n = 2 \times \frac{g l}{2} = g l$$

carico sulla Trave secondaria (interne)

$$l = 2000 \text{ mm} = 2.00 \text{ m}$$

$$q \begin{cases} g_k = 0.2 \text{ KN/m}^2 \text{ di lem.gr.} \\ q_k = 0.8 \text{ KN/m}^2 \end{cases} \left| \begin{array}{l} \text{Tracci.} \\ \text{di } 1.00 \text{ m} \end{array} \right. \begin{array}{l} g_n = 0.2 \text{ KN/m} \\ q_n = 0.8 \text{ KN/m} \end{array}$$

neve

$$0.8 \times 2.0 = 1.60 \text{ KN/m} \text{ su } 1 \text{ m di Tra. sc.}$$

$$\text{r.p. lem.gr.} \quad 0.2 \times 2.0 = 0.40 \text{ KN/m}$$

$$\text{r.p. Tra. sc.} \quad 0.3 \text{ KN/m}$$

$$\begin{array}{r} g_n = 0.70 \\ q_n = 1.60 \end{array}$$

$$g_n + q_n = 2.30 \text{ KN/m}$$

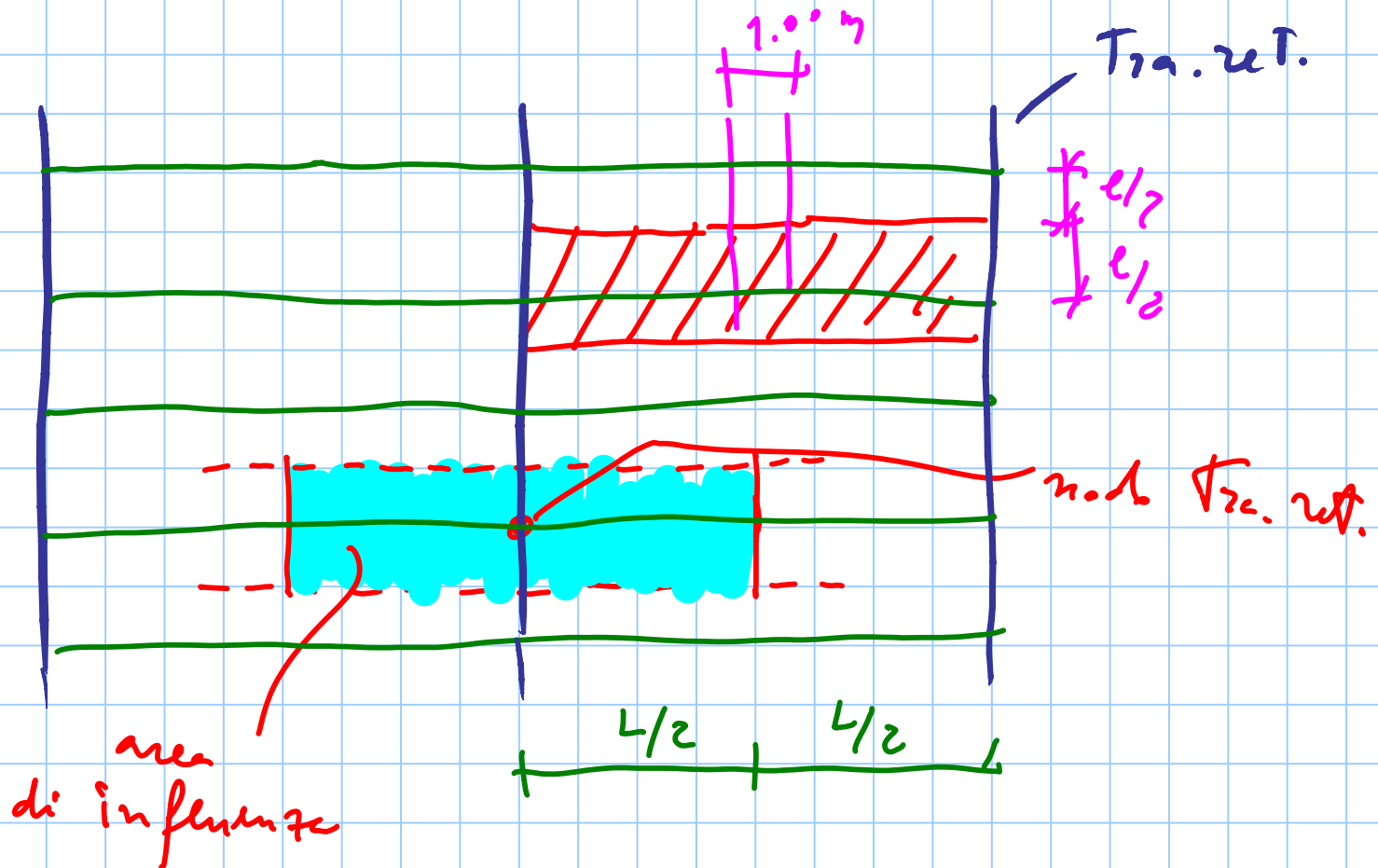
vedi interni, Tr. rel. interni

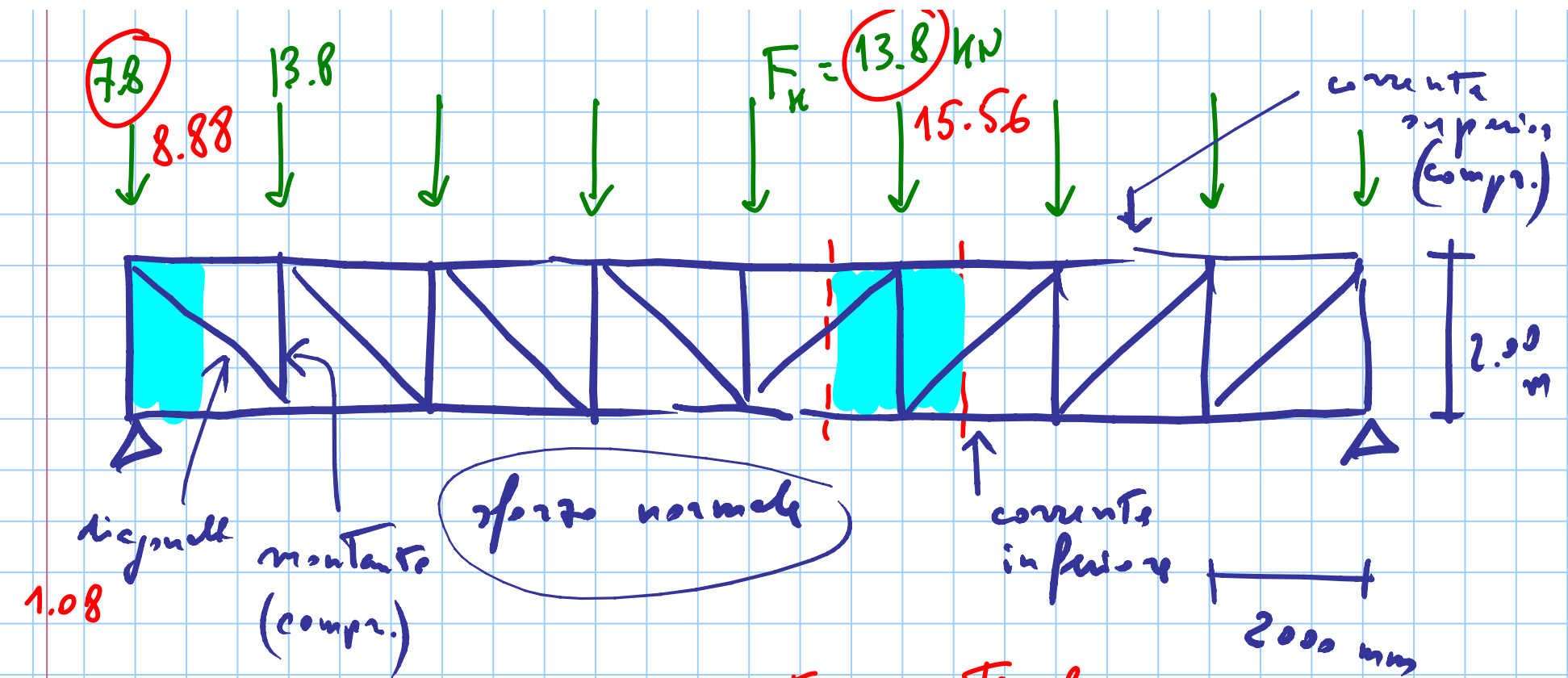
$$F_h = qL = 2.30 \times 6.00 = 13.80 \text{ kN}$$

12 m² di
len. g.

$$12 \times 0.8$$
$$12 \times 0.2$$

6 m li Th. 21.

$$6 \times 0.3$$




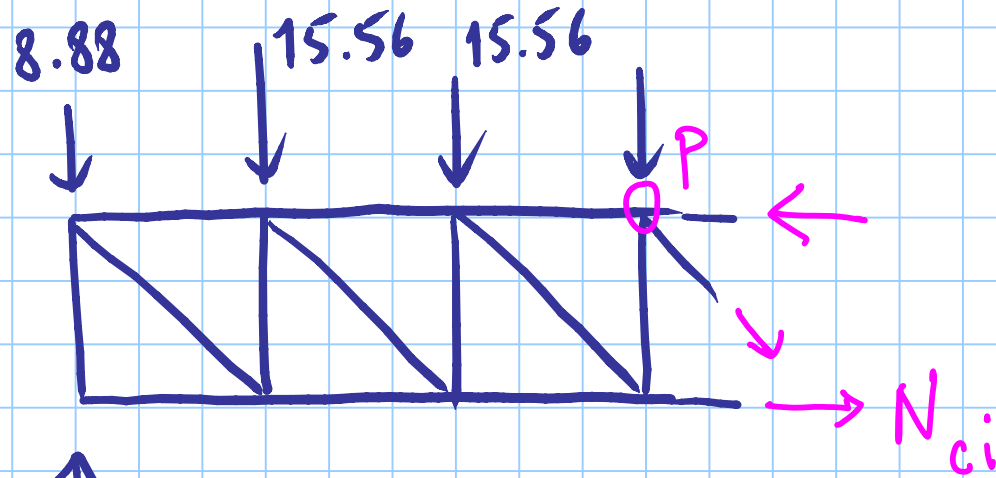
aste

$$g_k = 0.2 \text{ kN/m}$$

p.p. Trave reticular

$$l = 8.80 \text{ m}$$

$$g = 8.80 \times 0.2 = 1.76 \text{ kN}$$



$$\uparrow \frac{1}{2} (15.56 \times 7 + 8.88 \times 2)$$

$$63.34 \text{ kN}$$

$$N_{ci} = 116.7 \text{ kN}$$

eq. 201. P

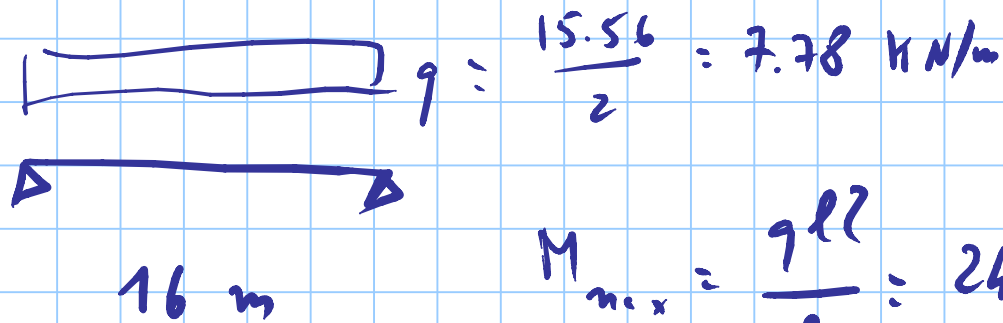
$$-(63.34 - 8.88) \times 6.00$$

$$15.56 \times 4.00$$

$$15.56 \times 2.00$$

$$N_{ci} \times 2.00$$

cf. con



$$M_{max} = \frac{q l^2}{8} = 248.96$$

$$N = \frac{M}{h} = \frac{248.96}{2} = 124.48 \text{ kN}$$

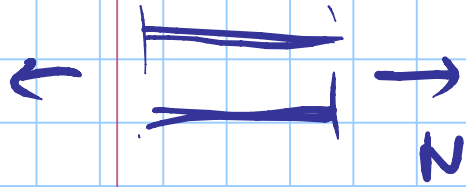
$$N = 116.7 \text{ kN}$$

prop. de J_n q_k

T.A.,

ojsi	izl	f_y	$\bar{\sigma}$
S 235	Fe 360	235	160
S 275	Fe 430	275	190
S 355	Fe 510	355	240
↑	↑		
f_y	f_y		

VERIFICA con modelli elastico lineari



$$N = \int_{area} \sigma dA$$

$$N = \sigma A$$

VERIFICA

A nota



$$\sigma = \frac{N}{A} \leq \sigma_{lim}$$

$$\sigma = \frac{N}{A}$$

PROGETTO

determina A

σ_{lim} nota



$$A \geq \frac{N}{\sigma_{lim}}$$

scegliere l'acciaio

S 235

$$\bar{\sigma}_s = 160 \text{ MPa}$$

$$A \geq \frac{116.7 \times 10^3}{160} = 729.4 \text{ mm}^2 = 7.294 \times 10^2 \text{ mm}^2$$

S.L.V.

$$g_d = \gamma_g \cdot g_k$$

\uparrow
1.3

$$g_d = \gamma_g \cdot g_n$$

\uparrow
1.5

F_d

N_{Ed}