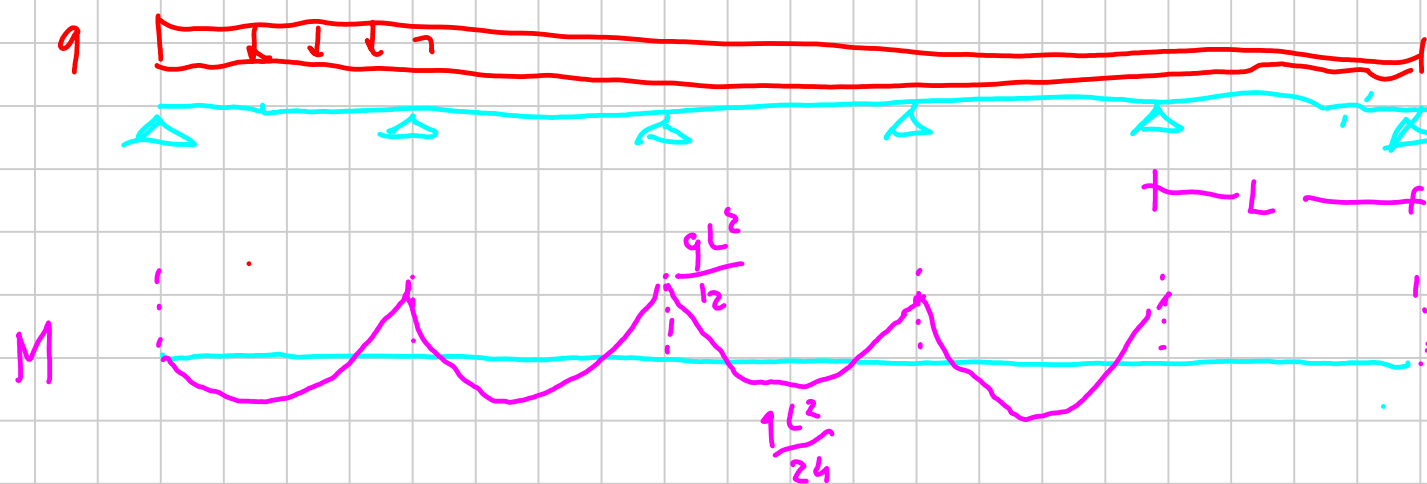
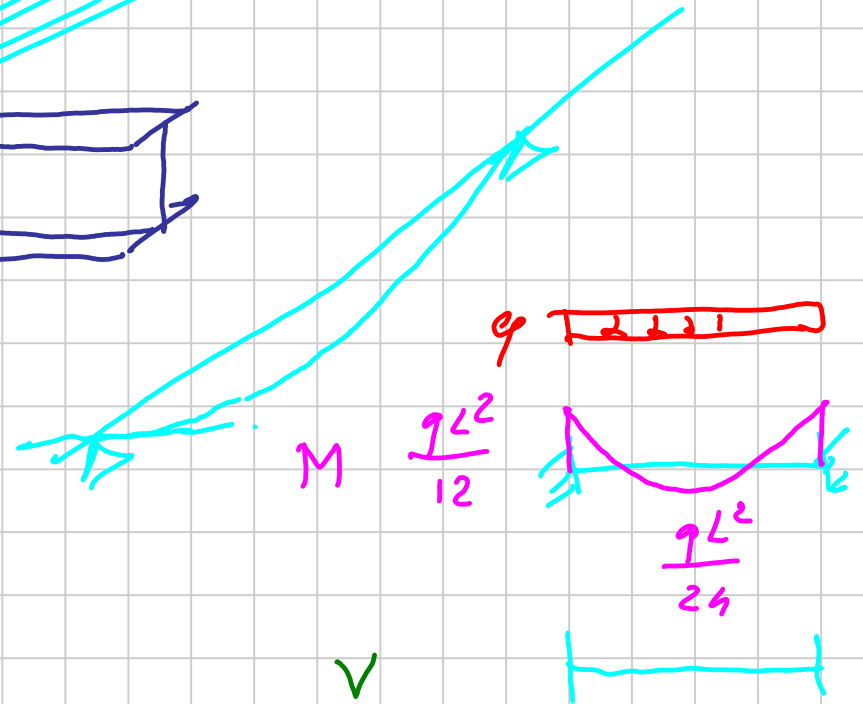
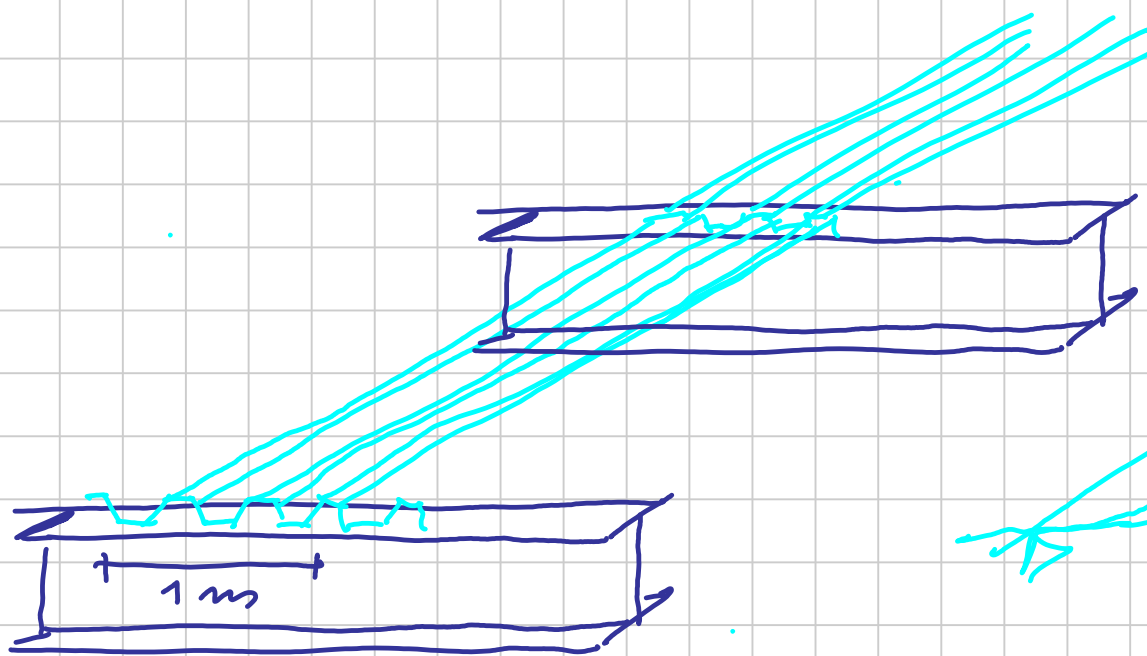
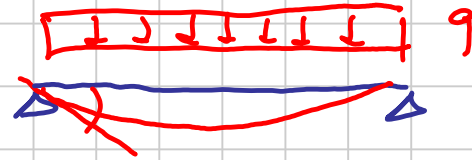


PIANTA

$$i = \frac{7.35}{3} = 2.45\text{m}$$

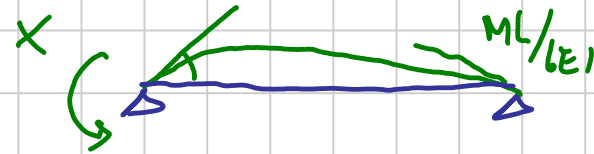




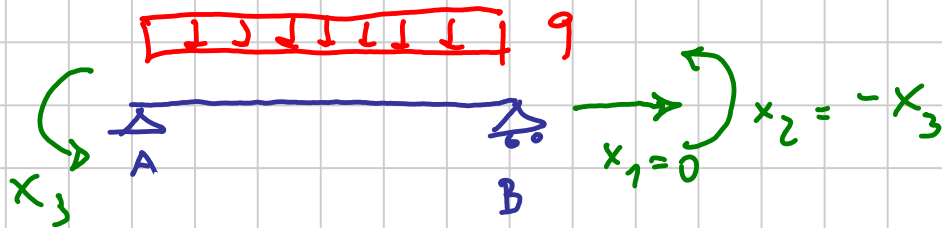
$$\varphi(q) = \frac{q L^3}{24 E I}$$

$$F/2 \cdot L^3 = F \cdot L^2$$

$$\frac{F}{L^2} L^3 = F L^2$$



$$\varphi(x) = \frac{M L}{3 E I}$$



$$\varphi_A = 0$$

$$\varphi_B = 0$$

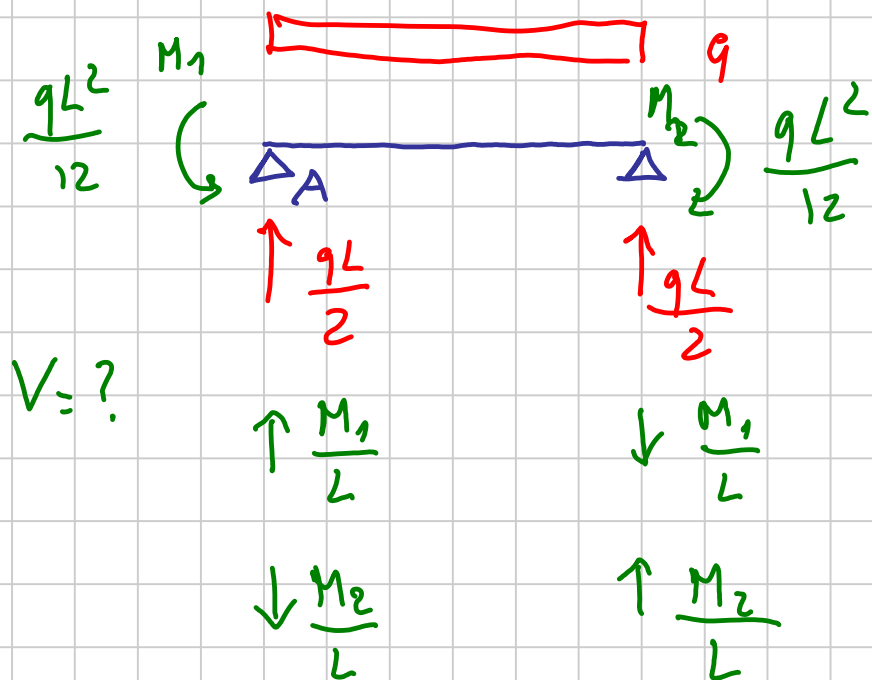
$$M_B = 0$$



$$X = \frac{q L^2}{12}$$

$$-\frac{q L^3}{24 E I} + \frac{X L}{3 E I} + \frac{X L}{6 E I} = 0$$

$$\frac{X L}{2 E I}$$



$V = ?$

$$V_A = \frac{qL}{2} + \frac{M_1 - M_2}{L} \approx \alpha \frac{qL}{2}$$

$$\approx M_1 \div M_2 \Rightarrow V = \frac{qL}{2}$$

$$V_A = \frac{qL}{2} \left(1 + \underbrace{\frac{M_1 - M_2}{qL^2/2}}_{\alpha} \right)$$

$$\alpha = 1 \div 1.2$$

CARICHI UNITARI

da resp. l.o.g.

$$t_{amp. n}^{est} g_n = 7.6 \text{ KN/m}$$

$$5.8 \text{ KN/m}$$

piano tipo SOLAIO $g_k = 4.1 \text{ KN/m}^2$

$$g_d = 1.3 \times 2.9 + 1.5 \times 1.2 = 5.57 \approx 5.6 \text{ KN/m}^2$$

$$q_k = 2.0 \text{ KN/m}^2$$

$$q_d = 1.5 \times 2.0 = 3.0 \text{ KN/m}^2$$

$$g_1 \quad 2.9$$

$$g_2 \quad 1.2 \text{ tramezzi}$$

TRAVE

$$g_k = 0.5 \text{ KN/m}$$

$$g_d = 1.3 \times 0.5 = 0.65 \approx 0.7 \text{ KN/m}$$

CARICO SU TRAVE SECONDARIA

che poggia su trave principale

Tipo	sviluppo	g_k	q_k	$g_k + q_k$	g_d	q_d	$g_d + q_d$
solaio	2.45 m	$4.1 \times 2.45 = 10.05$	$2.0 \times 2.45 = 4.90$	14.95	13.72	7.35	21.07 KN/m
peso Trave	1	0.5	—	0.5	0.65	—	0.65
tamponeo	—	—	—	—	—	—	—
TOTALE		10.55	4.90	15.45			21.72

Trave secondaria perimetrale

solaino

$$\frac{2.45}{2} + 0.40 = 1.62 \text{ m}$$

g_u

g_d

$g_u + g_u$

$g_u + g_d$

$$4.1 \times 1.62 = 6.64$$

$$2.0 \times 1.62 = 3.24$$

C

p.p.

1

0.5

—

.

Tampone

1

7.6

—

.

14.74

3.24

17.98

C

Trave secondaria con tampon. interne

		g_n	q_n	$g_n + q_n$	$g_d + q_d$
solcio	2.45	10.05	4.90		
p.p.	1	0.5			
tamp.int	1	<u>5.8</u>	<u> </u>	<u> </u>	<u> </u>
		16.35	4.90	21.25	29.26

trave principale interna

— Forza concentrata

solai

sviluppi.

$$6.80 \times 2.45 =$$

$$= 27.88 \text{ m}^2$$

$F_{g,k}$

$$4.1 \times 27.88 =$$

$$= 114.31 \text{ kN}$$

$$114.3$$

$F_{q,k}$

$$2 \times 27.88 =$$

$$= 55.76$$

$$55.8$$

$F_{gH} + F_{qH}$

$$170.07$$

$$170.1$$

$F_{gD} + F_{qD}$

—

p.p. trave sec.

$$6.80 \text{ m}$$

$$3.4 \text{ kN}$$

—

tamp. int.
(in trave sec.)

$$6.80 \text{ m}$$

$$39.4 \text{ kN}$$

$$157.1$$

—

$$55.8$$

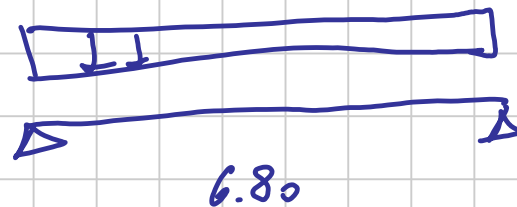
$$212.9$$

Trave principale - carico distribuito

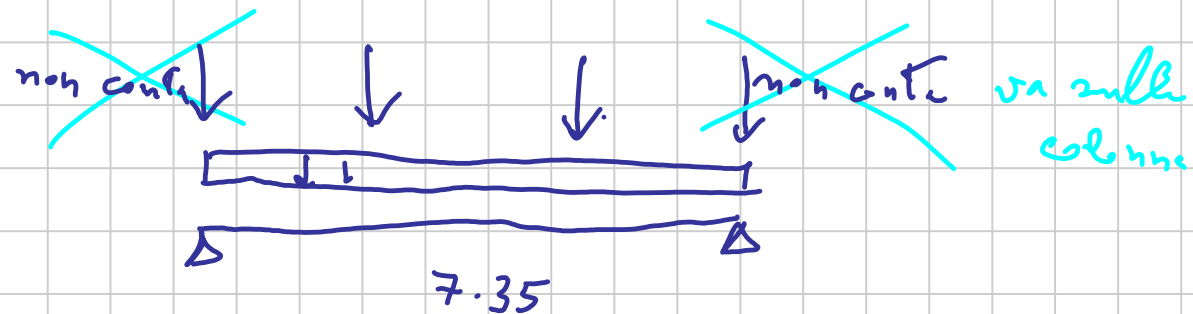
p.p. trave princip	1	0.5
tamp. n. interne	1	5.8
		<hr/>
		6.3 kN/m

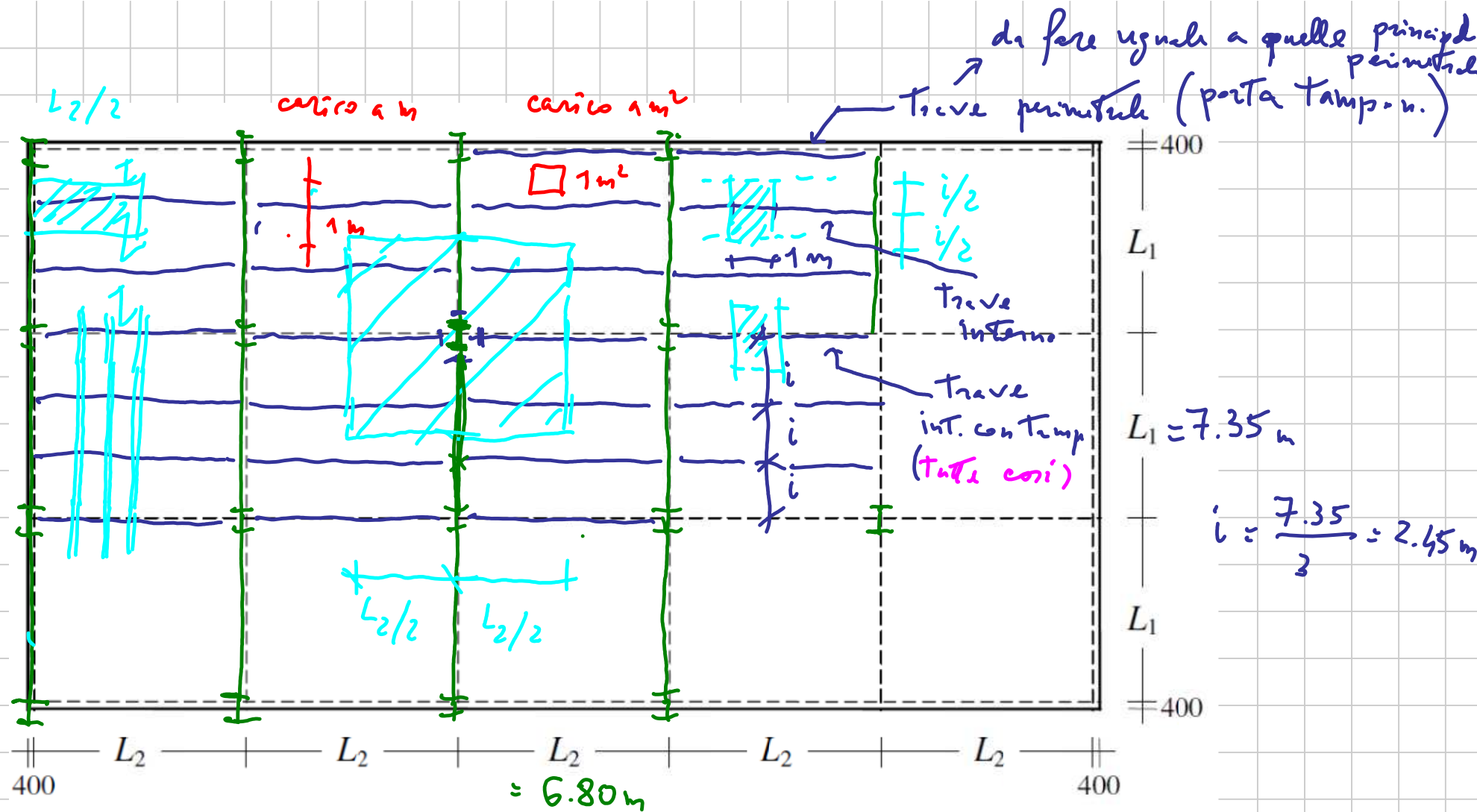
Schema geometrico e di carico

Trave secondari.



Trave principale





PIANTA

CARICO SULLA COLONNA INTERNA

q_k

q_d

Solaio $6.80 \times 7.35 =$
 $= 49.98 \text{ m}^2$

$4.1 \times 49.98 =$
 $= 204.9 \text{ kN}$

$2.0 \times 50 =$
 $= 100 \text{ kN}$

p.p. trave
secondaria $6.80 \times 3 =$
 20.4 m

$0.5 \times 20.4 =$
 $= 10.2 \text{ kN}$

—

p.p. trave
principale 7.35 m

$0.5 \times 7.35 =$
 $= 3.7 \text{ kN}$

—

Tampone
interna $L_1 + L_2$
 $6.80 + 7.35 = 14.15$

$5.8 \times 14.15 =$
 $= 82.1 \text{ kN}$

300.9

100

