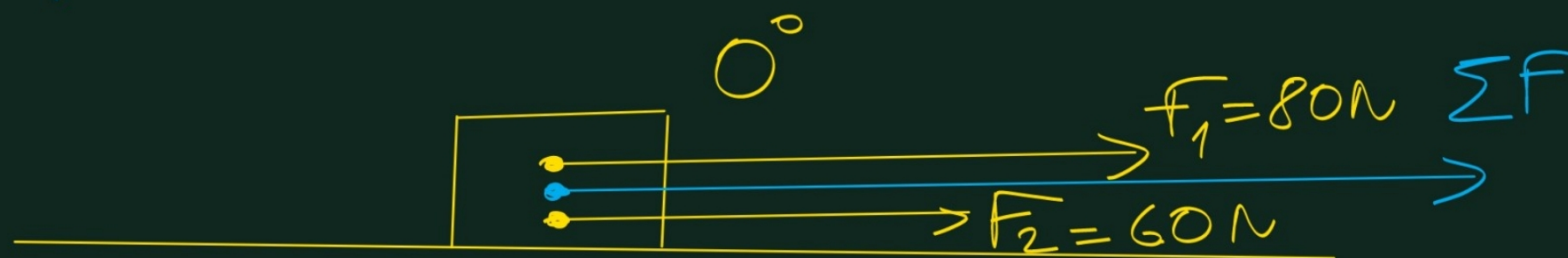


A6u. 1 6ε2.107

a)



$$\Sigma F = F_1 + F_2 = 140\text{N}$$

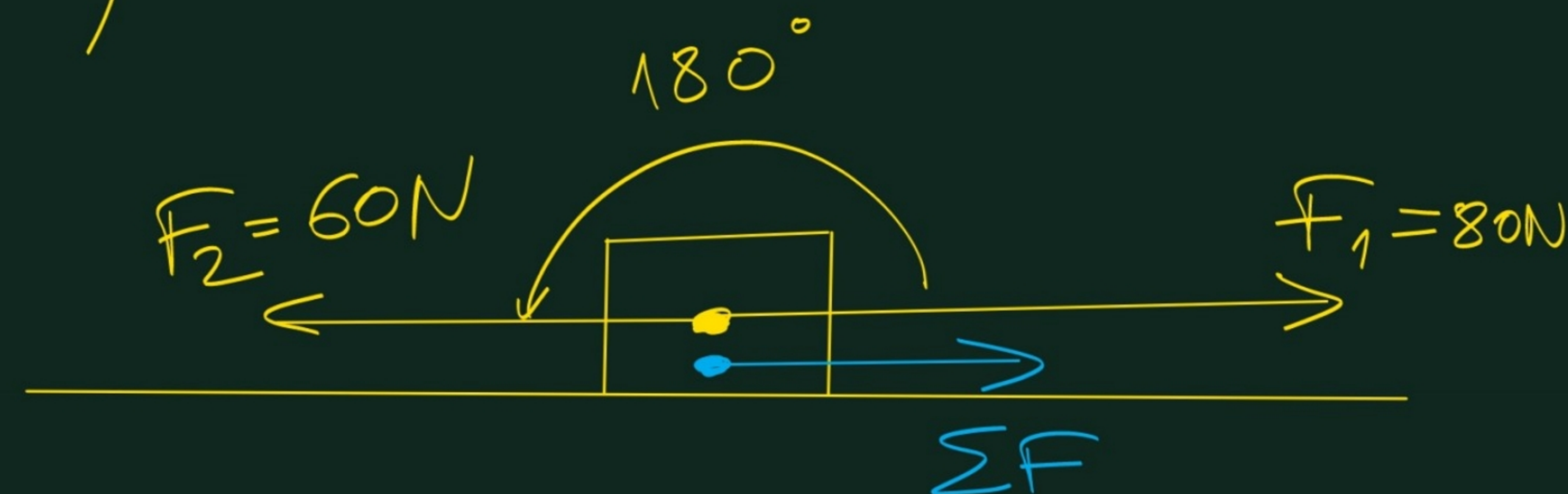
A6u. 3 | 6ε2.107

a) $F = F_1 + F_2 \Rightarrow$

$$10 = 4F_2 + F_2 \Rightarrow$$

$$\frac{10}{5} = \frac{5F_2}{5} \Rightarrow F_2 = 2\text{N} \text{ oder } F_1 = 8\text{N}$$

b)



$$\Sigma F = F_1 - F_2 = 80 - 60 = 20\text{N}$$

b) $F = F_1 - F_2 \Rightarrow F = 3F_2 - F_2 \Rightarrow F = 2F_2 \Rightarrow \frac{10}{2} = \frac{2F_2}{2} \Rightarrow$

$$F_2 = 5\text{N} \text{ oder } F_1 = 15\text{N}$$

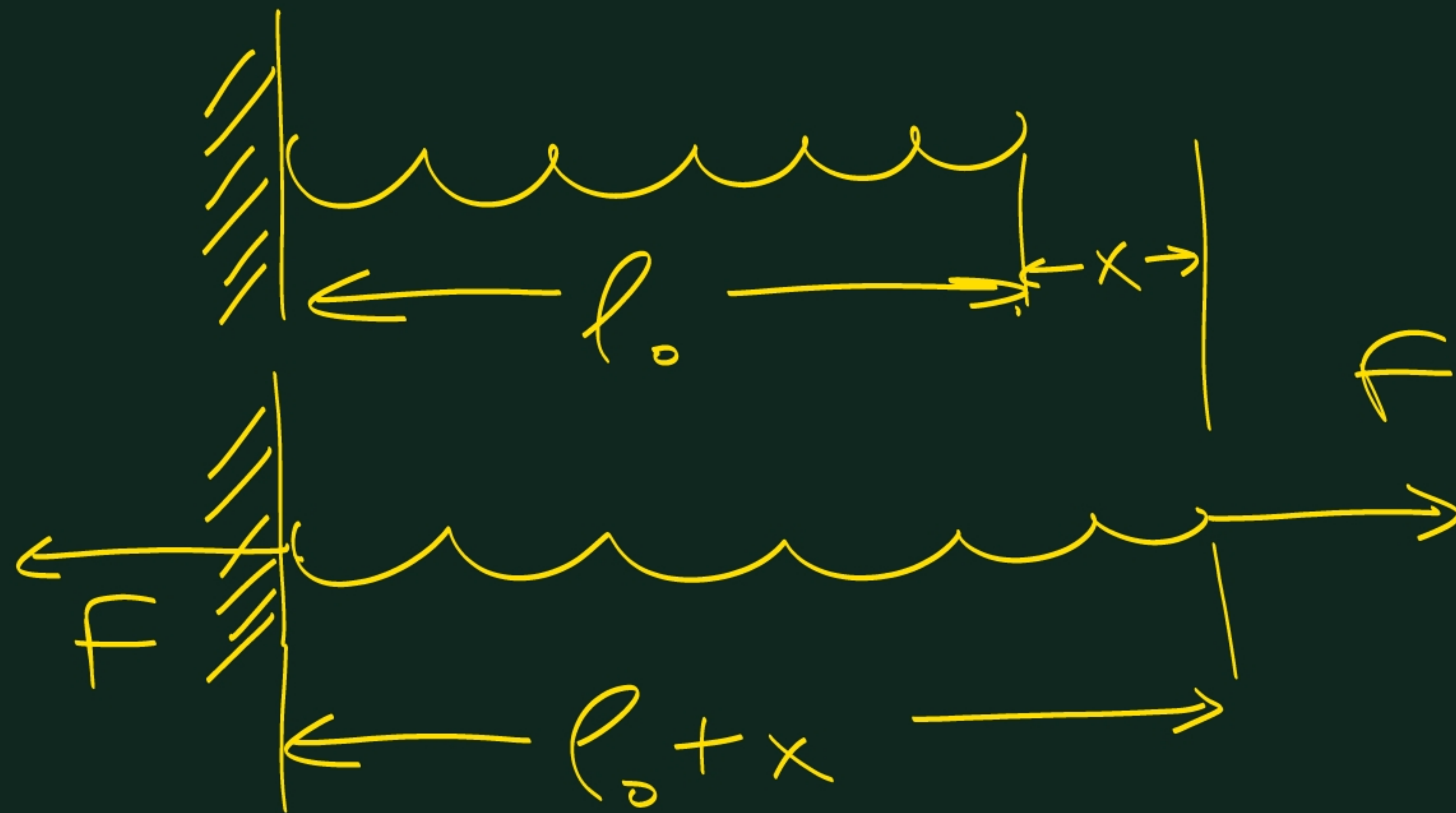
Αδυναμία 4 βελ. 107

β)

α) Νόμος Hooke: $F = k \cdot x$

x = επιμήκυνση ή συστολή

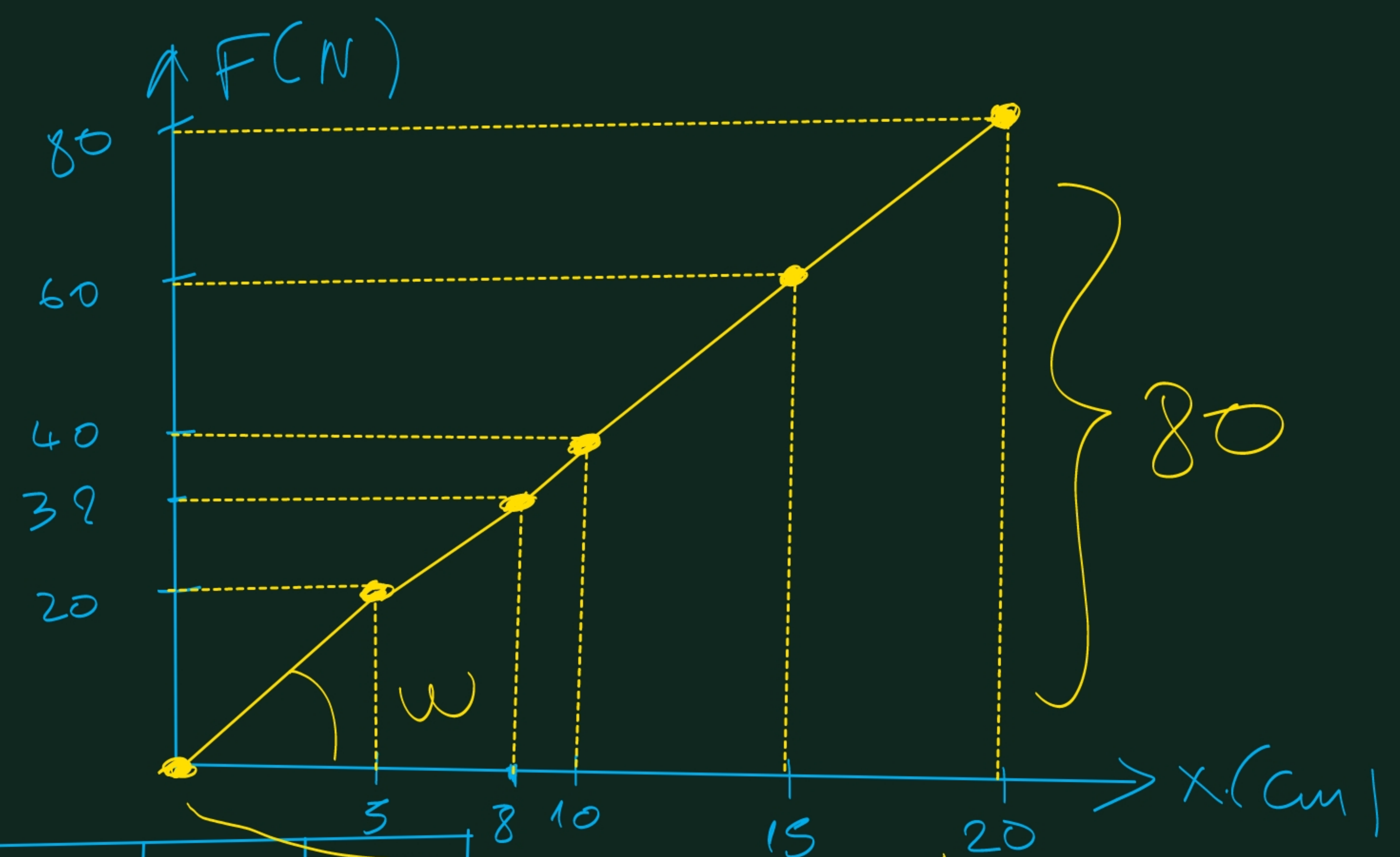
Γράφεται και σαν $\Delta l = \text{υεταβολή μήκους}$



Επιμήκυνση (cm)	5	8	10	15	20
Βάρος (N)	20	32	40	60	80

$$\frac{5}{x} = \frac{20}{80} \Rightarrow x = 20$$

$$\frac{x}{40} = \frac{20}{80} \Rightarrow 4x = 40 \Rightarrow x = 10$$



γ) $k_{\lambda\iota\sigma\eta} = \varepsilon\varphi\omega = k$

$$\varepsilon\varphi\omega = k = \frac{80}{20} = 4 \text{ N/cm}$$

Αρα: $k = \frac{4 \text{ N}}{0,01 \text{ m}} = 400 \text{ N/m}$