

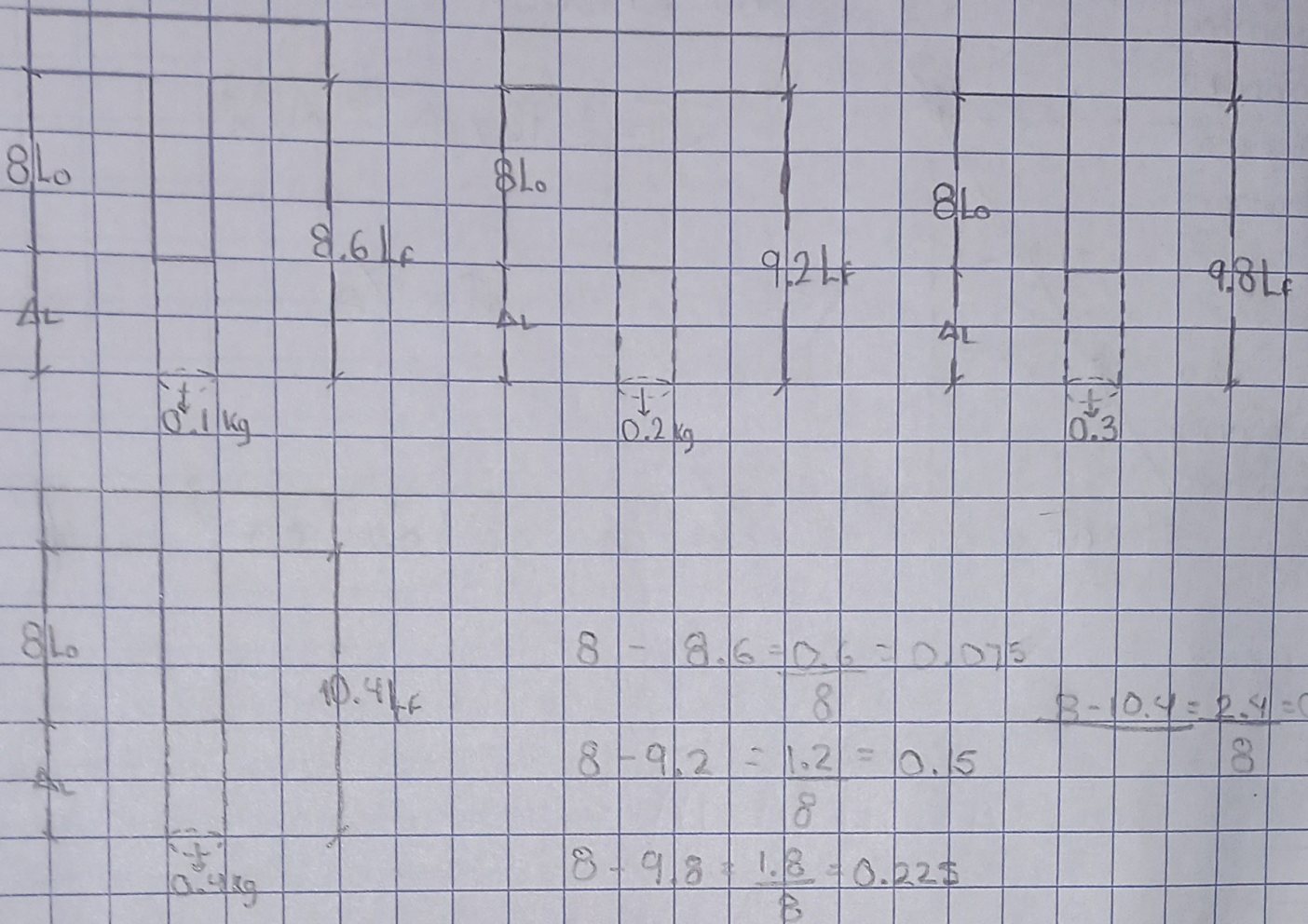
$$\sigma_y = 2.90 \times 10^{-06} \text{ N/m}^2$$

$$\sigma = F/A$$

Zona plástica

Zona Plástica

Carga (g)	0	100	200	300	400
Longitud (cm)	8	8.6	9.2	9.8	10.4



Carga	Fuerza	$\sigma = F/A$	$\rho = \Delta L/L_0$	$\gamma = \sigma/\rho$
100g	$0.1 \times 9.81 \text{ m/s}^2$	$0.981 \text{ N} / 4.5 \times 10^{-6}$	0.075	$0.000000218 = 2.90 \times 10^{-07}$
0.1 kg	= 0.981 N	= 0.000000218	0.075	0.075
200g	$0.2 \times 9.81 \text{ m/s}^2$	$1.962 \text{ N} / 4.5 \times 10^{-6}$	0.15	$0.000000436 = 2.90 \times 10^{-06}$
0.2 kg	= 1.962 N	= 0.000000436	0.15	0.15
300g	$0.3 \times 9.81 \text{ m/s}^2$	$2.943 \text{ N} / 4.5 \times 10^{-6}$	0.225	$0.000000654 = 2.90 \times 10^{-06}$
0.3 kg	= 2.943 N	= 0.000000654	0.225	0.225
400g	$0.4 \times 9.81 \text{ m/s}^2$	$3.924 \text{ N} / 4.5 \times 10^{-6}$	0.3	$0.000003872 = 1.29 \times 10^{-05}$
0.4 kg	= 3.924 N	= 0.000003872	0.3	0.3

Formula Fuerza: $m \cdot g = 0.1 \times 9.81 \text{ m/s}^2$

$\gamma = \frac{F/A}{L_0}$

$\Delta L = L_0 - L_f = \frac{F}{A}$

$A_{\text{secc. trans}} = 3 \times 1.5 \text{ mm}^2 = 4.5 \times 10^{-6} \text{ m}^2$