Ensayo

Nombre del Alumno: Aguilar López Jorge Alberto

Nombre del tema: Esfuerzos y Deformaciones

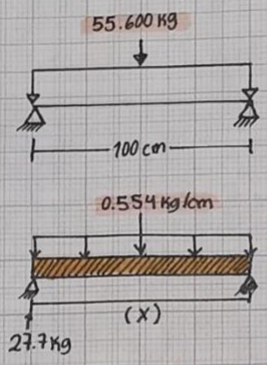
Parcial: 4

Nombre de la Materia: Resistencia de materiales de construcción

Nombre del profesor: Pedro Alberto García López

Nombre de la Licenciatura: Arquitectura

Cuatrimestre: 4



55.400 kg (100 cm) = 5,540 kg

RA = RB = $\frac{qL}{2}$

$\frac{0.554 \text{ kg/cm } (100 \text{ cm})}{2} = 27.7 \text{ kg}$

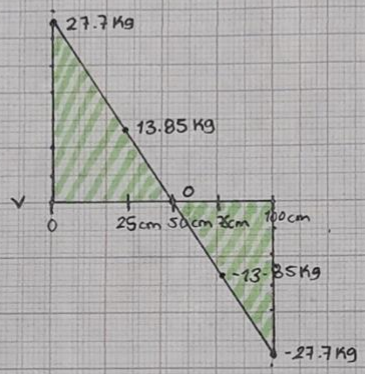
27.7 kg - [0.554 kg/cm (x)] - V = 0

V = 27.7 kg - [0.554 kg/cm (x)]

-27.7 kg - [0.554 kg/cm (x)(x/2)] + M = 0

-27.7 kg - [0.277 x^2 + M = 0

M = 27.7 kg (x) - 0.277 K/cm (x^2)



Cortante (V) =

X	0cm	25cm	50cm	75cm	100cm
V	27.7 kg	13.85 kg	0 kg	-13.85 kg	-27.7 kg

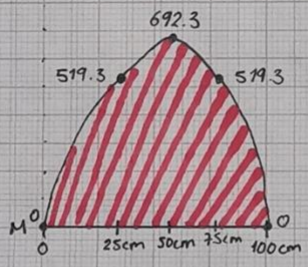
V = 27.7 kg - [0.554 kg/cm (0)] = 27.7 kg

V = 27.7 kg - [0.554 kg/cm (25)] = 13.85 kg

V = 27.7 kg - [0.554 kg/cm (50)] = 0 kg

V = 27.7 kg - [0.554 kg/cm (75)] = -13.85 kg

V = 27.7 kg - [0.554 kg/cm (100)] = -27.85 kg



Momento (M) =

X	0cm	25cm	50cm	75cm	100cm
	0 kg	519.3 kg	692.3 kg	-519.3 kg	0 kg

M = 27.7 kg (0) - 0.277 K/cm $(0)^2$ = 0 kg

M = 27.7 kg (25cm) - 0.277 K/cm $(25cm)^2$ = 519.3 kg

M = 27.7 kg (50cm) - 0.277 K/cm $(50cm)^2$ = 692.3 kg

M = 27.7 kg (75cm) - 0.277 K/cm $(75cm)^2$ = -519.3 kg

M = 27.7 kg (100cm) - 0.277 K/cm $(100cm)^2$ = 0 kg