



ARQ. JOSE LISANDRO LOPEZ ALFARO

NOMBRE DEL TEMA: ESFUERZOS Y DEFORMACIONES

PARCIAL: IV

NOMBRE DE LA MATERIA: RESISTENCIA DE MATERIALES DE CONSTRUCCION

RESISTENCIA DE MATERIALES DE CONSTRUCCIO

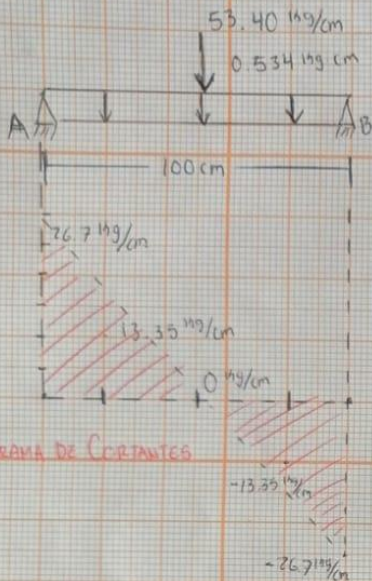
PARCIAL 4

ARQ. PEDRO ALBERTO GARCIA LOPEZ

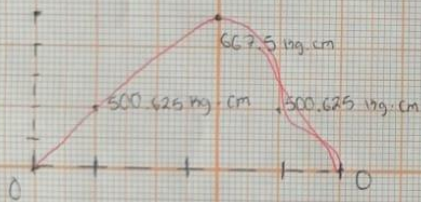
NOMBRE DE LA LICENCIATURA: ARQUITECTURA

CUATRIMESTRE: IIII

JOSE LISANDRO LÓPEZ ALFARO



• Diagrama de Cortantes



• Grafica de Momentos

$$1- R_A = R_B = P/2 = \frac{53.40}{2} = 26.7$$

$$2- \sum F_Y = 0 \quad 26.7 - [0.534 \text{ kg/cm} (x)] - V = 0$$

$$V = 26.7 - [0.534 \text{ kg/cm} (x)]$$

3- Ecuación de momentos.

$$26.7 \cdot (x) - [0.534 \text{ kg/cm} (x) (x/2)] = 0$$

$$M = -26.7 \cdot x - \frac{0.534 \text{ kg/cm} (x^2)}{2}$$

$$M = -26.7 \text{ kg/cm} \cdot (x) - 0.267 x^2 + M = 0$$

$$M = 26.7 \text{ kg/cm} (x) - 0.267 \text{ kg/cm} (x^2)$$

$$V = 26.7 \text{ kg/cm} - [0.267 \text{ kg/cm} (x)]$$

$$M = 26.7 \text{ kg/cm} (x) - 0.267 \text{ kg/cm} (x^2)$$

$$V = 26.7 \text{ kg/cm} - [0.534 \text{ kg/cm} (0)] = 26.7 \text{ kg}$$

$$V = 26.7 \text{ kg/cm} - [0.534 \text{ kg/cm} (25)] = 13.35 \text{ kg}$$

$$V = 26.7 \text{ kg/cm} - [0.534 \text{ kg/cm} (50)] = 0 \text{ kg}$$

$$V = 26.7 \text{ kg/cm} - [0.534 \text{ kg/cm} (75)] = -13.35 \text{ kg}$$

$$V = 26.7 \text{ kg/cm} - [0.534 \text{ kg/cm} (100)] = -26.7 \text{ kg}$$

$$M = 26.7 (0) - 0.267 \text{ kg/cm} (0^2) = 0 \text{ kg} \cdot \text{cm}$$

$$M = 26.7 (25) - 0.267 \text{ kg/cm} (25^2) = 500.625 \text{ kg} \cdot \text{cm}$$

$$M = 26.7 (50) - 0.267 \text{ kg/cm} (50^2) = 667.5 \text{ kg} \cdot \text{cm}$$

$$M = 26.7 (75) - 0.267 \text{ kg/cm} (75^2) = 500.625 \text{ kg} \cdot \text{cm}$$

$$M = 26.7 (100) - 0.267 \text{ kg/cm} (100^2) = 0 \text{ kg} \cdot \text{cm}$$