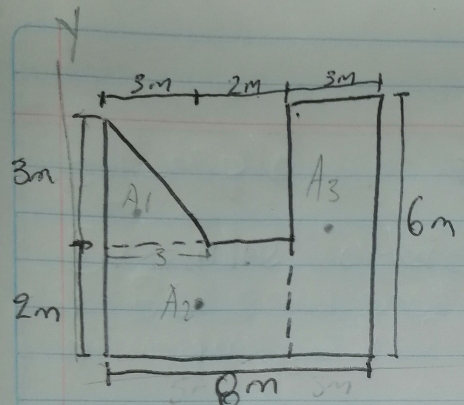

$X_1 = 1$ $X_2 = 2.5$ $X_3 = 6.5$

$Y_1 = 3$ $Y_2 = 1$ $Y_3 = 3$

$A_1 = \frac{b \times h}{2} = \frac{3 \times 3}{2} = 4.5 m^2 \rightarrow$ Triangulo

$A_2 = b \times h = 5 \times 2 = 10 \rightarrow$ Rectangulo

$A_3 = b \times h = 3 \times 6 = 18 \rightarrow$ Rectangulo

$X_{centroide} = \frac{A_1 \cdot X_1 + A_2 \cdot X_2 + A_3 \cdot X_3}{A_1 + A_2 + A_3}$

$X_{centroide} = \frac{(4.5)(1) + (10)(2.5) + (18)(6.5)}{4.5 + 10 + 18} = \frac{146.5}{32.5} = 4.50 m$

$Y_{centroide} = \frac{(4.5)(3) + (10)(1) + (18)(3)}{4.5 + 10 + 18} = \frac{77.5}{32.5} = 2.38 m$

Arquitectura 3er Cuatrimestre

Luis Eduardo Hernández Sántiz