UDS
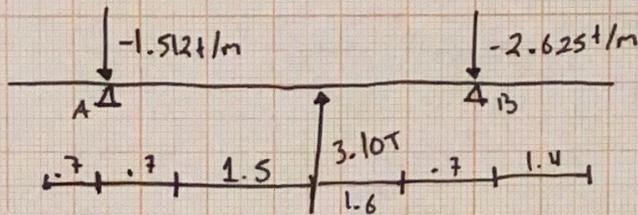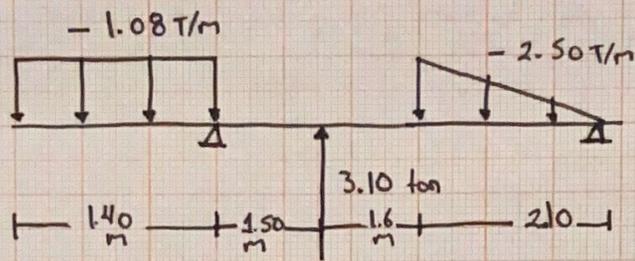
UBER Emmanuel López Pulido

"ARQUITECTURA"

Estatica Para la ARQUITECTURA

"Ejercicios"

Pedro Alberto García López

$\Sigma M = 0$

$$[(1.512\,t/m)\,0.7] + [(3.10)\,1.5] + [(RB)\,5.2] + [(-2.625)\,3.8m]$$

$$1.05484 + 4.65 + (RB)\,5.2 - 9.975$$

$$4.267\,t/m\ (RB)\,5.5m$$

$$RB = 4.267/5.2$$

$$RB = 0.82\ T$$

$RA = -1.512 + 3.10 - 2.625 + 0.82 = 0$
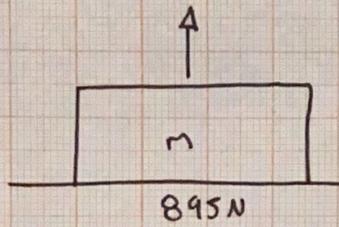
$RA = -4.137 + 3.92 = 0$
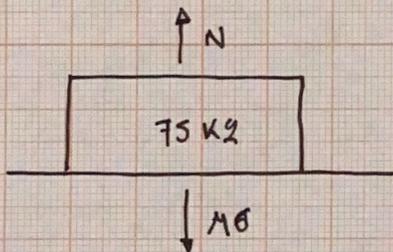
$RA = 0.217 = 0$

$RA = 0.217\,T$

Comprobacion

$-1.512 + 3.10 - 2.625 + 0.217 = 0$

$$\Sigma FY = 0$$

$$\Sigma FY = 895N - 895N = 0$$

$$N = 9.81 / 895N = 91.32K$$

$$\Sigma FY = 0$$

$$\Sigma FY = 735N - 735N = 0$$

$$N = 75Kg \cdot 9.81 m/s^2 = 735N$$

Un tractor de 2100 lb se utiliza para levantar 900 lb
de grava, determina cada una de la reacciones de sus llantas
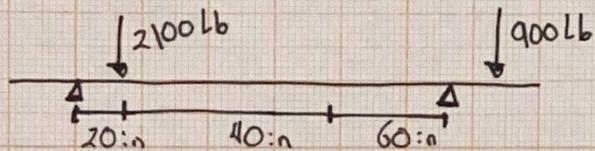
$\Sigma M =$

$$[(-2100 Lb)20 \text{ in})] + [(-900 Lb)110 \text{ in}] + [(RB)60 \text{ in}]$$

$$-42,000 \text{ lb·in} - 99,000 \text{ lb·In} + (RB) 60 \text{ in}$$

$$-141,000 \text{ lb·in} + (RB) 60 \text{ in}$$

$$RB = \frac{141,000 \text{ lb·in}}{60 \text{ in}}$$

$$RB = 2350 \text{ lb}$$

$RA = -2100 - 900 + 2350 = 0$

$RA = -3000 lb + 2350 \text{ lb} = 0$

$RA = -650 \text{ lb} = 0$

comprobacion

$650 - 2100 - 900 + 2350 = 0$