

PREGUNTA N°1

a)

GRUPO A = 10

CONDUCTORES		NO CONDUCTORES	
MUJERES	HOMBRES	MUJERES	HOMBRES
2	2	2	4

$C = 4$

$NC = 6$

$* 4 \rightarrow 100\%$

$X \rightarrow 50\%$

$X = 2$

$\frac{1}{3} \cdot 6 = 2$

$* B = 2A$

GRUPO B = 20

CONDUCTORES		NO CONDUCTORES	
MUJERES	HOMBRES	MUJERES	HOMBRES
4	6	5	5

$C = 10$

$* 20 \cdot \frac{1}{4} = 5$

$$* B = 2 \cdot 10 \rightarrow A = 10 \Rightarrow B = 2A$$

$$B = 20$$

$$b) \% \pi.C = \frac{2+4}{4+10} = \frac{6}{14}$$

$$14 \rightarrow 100\% \quad x = 42,8\%$$

$$6 \rightarrow x$$

$$c) \frac{T_{NC}}{T_C} = \frac{6+10}{4+10} = \frac{16}{14} = \frac{8}{7} //$$

R11 8 es a 7

$$d) \% H_{NC} = \frac{4+5}{T_B} = 9$$

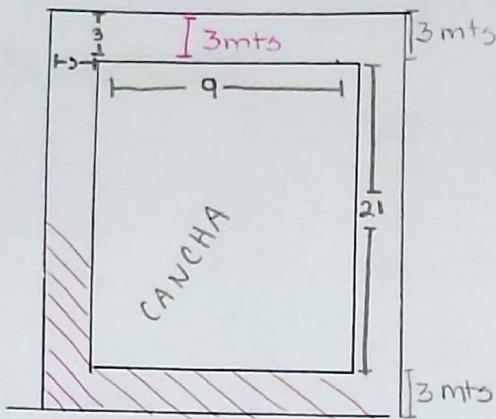
$$20 - 100\% \quad x = 45\%$$

$$9 - x\%$$

$$e) \frac{M_{NC}}{M_{AYB}} = \frac{2+5}{4+9} = \frac{7}{13} //$$

R11 7 es a 13

PREGUNTA N° 3



$$X \text{ Largo} = Y \cdot \frac{7}{3} = 21 \text{ mts}$$

$$Y \text{ Ancho} = Y = 9 \text{ mts}$$

$$\bar{A}rea = 21 \times 9$$

$$\bar{A}rea = 21 \cdot 9$$

$$\bar{A}rea = 189 \text{ m}^2$$

$$1 \text{ galón} \rightarrow 10 \text{ m}^2$$

$$* Y = \frac{21 \cdot \frac{3}{7}}{1}$$

$$Y = 9$$

$$\bar{A}rea \text{ nueva} = (21 + 3 + 3) \cdot (9 + 3 + 3)$$

$$\bar{A}_N = 27 \cdot 15$$

$$\bar{A}_N = 405 \text{ m}^2$$

$$* \bar{A}_{LIBRE} = 405 \text{ m}^2 - 189 \text{ m}^2$$

$$A_{LIBRE} = 216 \text{ m}^2 //$$

$$16 \rightarrow 10 \text{ m}^2$$

$$X6 \rightarrow 216 \text{ m}^2$$

$$X = 21,6 \text{ galones}$$

1 mano

$$21,6 \times 2 = 43,2$$

2da mano

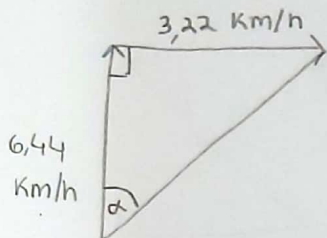
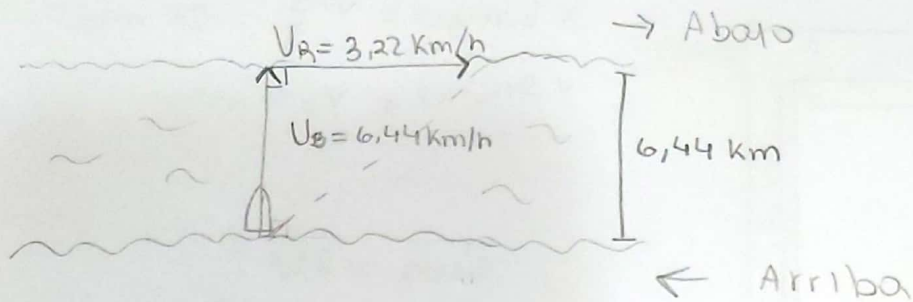
ó 22 x 2
APROX
44 galones

a)

b) Área de la trampa libre es de 216 m^2

c) Galones requeridos para 2 manos, 43 galones aproximados (43,2). ó 44 galones y sobra pintura.

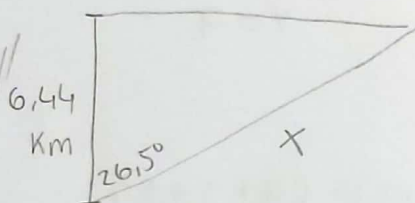
PREGUNTA N° 2



$$\tan^{-1} \frac{OP}{ady} = \frac{3,22}{6,44} = 26,5^\circ = \alpha$$

a) dirección $26,5^\circ$

b) 1 hora 6 minutos



$$\cos(26,5^\circ) = \frac{6,44}{X}$$

$$X = \frac{6,44}{0,9}$$

$$X = 7,15 \text{ km}$$

$$6,44 \text{ km} \rightarrow 1 \text{ Hora}$$

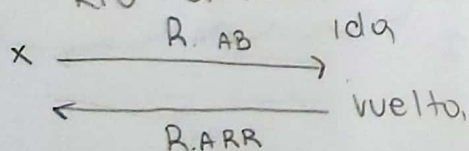
$$7,15 \text{ km} \rightarrow X \text{ horas}$$

$$X = 1,1 \text{ horas}$$

$$\begin{array}{cc} 1H & 60 \text{ min} \\ 0,1 & x = 6 \text{ min} \end{array}$$

c) Río abajo 18 minutos

Río arriba 1 hora



$$v = \frac{d}{t}$$

$$* t = t_s + t_b$$

$$t = \frac{3,22 \text{ km}}{9,66 \frac{\text{km}}{\text{h}}} + \frac{3,22 \text{ km}}{3,22 \frac{\text{km}}{\text{h}}}$$

$$t = 1,3$$

$$t = \frac{d}{v} \quad * t = \frac{3,22 \text{ km}}{9,66 \text{ km/h}}$$

$$t = 0,3 \text{ horas}$$

$$\left. \begin{array}{l} t = \frac{3,22 \text{ km}}{3,22 \text{ km/h}} \\ t = 1 \text{ hora} \end{array} \right\} 1,3 \text{ hrs}$$

$$\vec{v}_{RAB} = \left(6,44 \frac{\text{km}}{\text{h}} + 3,22 \frac{\text{km}}{\text{h}} \right)$$

$$\vec{v}_{RAB} = 9,66 \text{ km/h}$$

$$\vec{v}_{RARR} = (6,44 \text{ km/h} - 3,22 \text{ km/h})$$

$$\vec{v}_{RARR} = 3,22 \text{ km/h}$$