

TL

Buenos F. ALVARADO 6.

I

a)

|    | Grupo 1 |   | Grupo 2 |   |
|----|---------|---|---------|---|
|    | H       | M | H       | M |
| C  | 2       | 2 | 6       | 4 |
| NC | 4       | 2 | 5       | 5 |

$$\text{Grupo}_1 = 10$$

$$\text{Grupo}_2 = 2 \cdot 10 = 20$$

$$H/mc = \frac{20}{4} = 5$$

$$\begin{aligned} b) \quad M_c &= 16 \\ C &= 14 \end{aligned}$$

$$\begin{aligned} 6 &\rightarrow x\% \\ 14 &\rightarrow 100\% \end{aligned}$$

$$\frac{6 \cdot 100}{14} = 42,9\%$$

$$\begin{aligned} c) \quad N_c &= 16 \\ C &= 14 \end{aligned}$$

$$\text{proporcion} = \frac{16}{14} = \frac{8}{7} //$$

$$\begin{aligned} d) \quad H_{Nc} &= 9 \\ G_2 &= 20 \end{aligned}$$

$$\begin{aligned} 9 &\rightarrow x\% \\ 20 &\rightarrow 100\% \end{aligned}$$

$$\frac{9 \cdot 100}{20} = 45\%$$

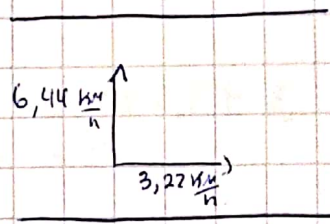
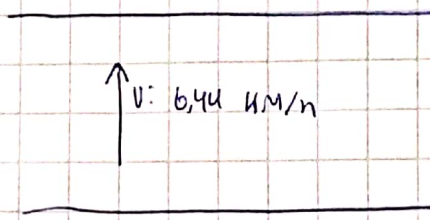
$$\begin{aligned} e) \quad M_{mc} &= 7 \\ M &= 13 \end{aligned}$$

$$\text{Proporcion} = \frac{7}{13} //$$

II.

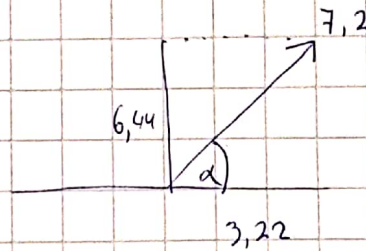
tranquilo

con corriente



$$\vec{v} = (3,22 \hat{i} + 6,44 \hat{j})$$

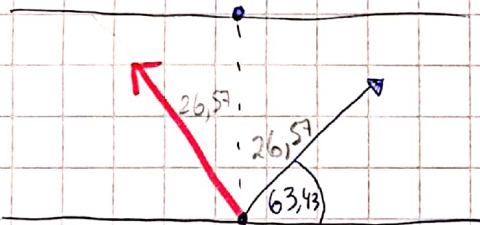
$$|\vec{v}| = 7,2 \frac{\text{km}}{\text{h}}$$



$$\tan \alpha = \frac{6,44}{3,22}$$

$$\alpha = \tan^{-1}(2)$$

$$\alpha = 63,43^\circ$$



Si vemos el extremo del río al Norte de nosotros, la dirección a la cual debe apuntar es de  $116,57^\circ$  respecto de la horizontal.

Eje y :  $t = \frac{d}{v} \rightarrow t = \frac{6,44}{6,44} \quad t = 1 \text{ hora}$

~~Eje x~~

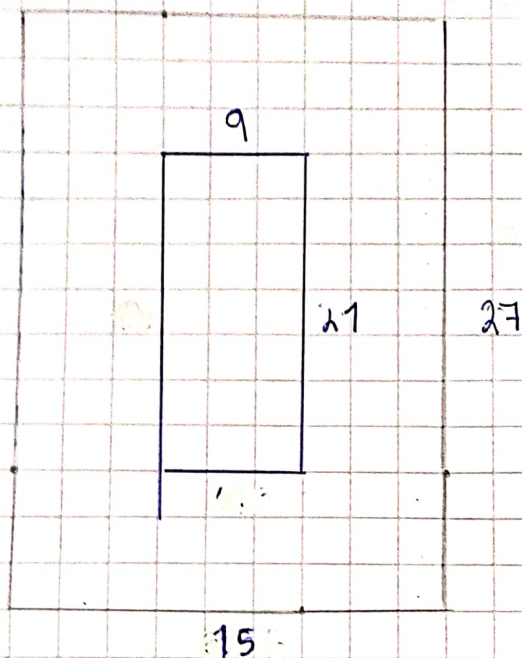
$$c) \quad \frac{d}{v} + \frac{d}{v} = t$$

$$\frac{3,22 \text{ km}}{(6,44 + 3,22) \text{ km/h}} + \frac{3,22 \text{ km}}{(6,44 - 3,22) \text{ km/h}} = 0,3 \text{ h} + 1, = 1,3 \text{ horas.}$$

V. Río Abajo      V. Río Arriba



III



$$\frac{\text{Largo}}{\text{Ancho}} = \frac{7}{3} \Rightarrow \frac{7}{3} = \frac{21}{x} \rightarrow 7x = 63$$

$$x = 9$$

Ancho de la cancha = 9,0 (m)

Area cancha =  $189 \text{ (m)}^2$

Largo con franja =  $21 + 6 = 27 \text{ m}$

Ancho con franja =  $9 + 6 = 15 \text{ m}$

Area cancha con franja libre =  $405 \text{ m}^2$

Area a pintar = Area grande - Area chica

Area a pintar =  $405 - 189$

=  $216 \text{ m}^2$

El area que se va a pintar es de  $216 \text{ m}^2$

|              |              |              |
|--------------|--------------|--------------|
| $216 : 10 =$ | 21,6 galones | primer mano  |
|              | 21,6 galones | segunda mano |
|              | <hr/>        |              |
|              | 43,2 galones | en total     |

La medida exacta es de 43,2 galones, pero no venden 0,2 galones, habría que sumar 1 más por lo tanto sería 44 galones.