PREGUNTA N°1 / BAASCH

	GRUPO 1		GRUPO 2	
Conductores	4		10	
	Hombres	Mujeres	Hombres	Mujeres
	2	2	6	4
NO Conductores	6		10	
	Hombres	Mujeres	Hombres	Mujeres
	4	2	1	9
Total por sexo	6	4	7	13
Total GRUPO	10		20	

a) GRÁFICO

b) $\frac{6}{14} = \frac{x}{100}$ $\quad x = \frac{6 \cdot 100}{14}$ $\quad \boxed{x = 42,86\%}$ → mujeres conductoras

c) $\frac{16}{14} = \frac{8}{7}$ " → Proporción total de NO conductores

d) $\frac{4}{20} = \frac{x}{100}$ $\quad x = \frac{4 \cdot 100}{20}$ $\quad \boxed{x = 20\%}$ → Hombres NO conductores

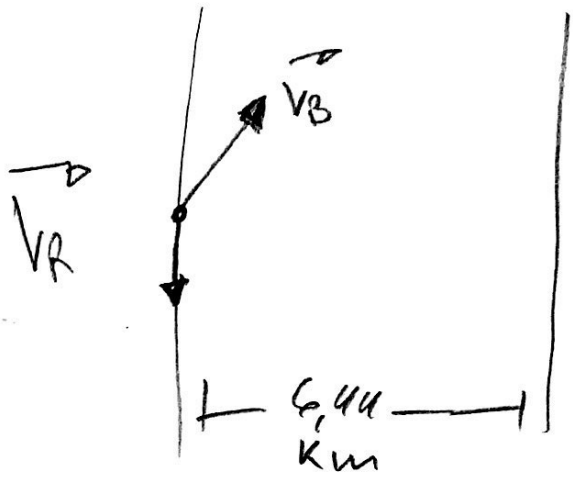
e) $\frac{2}{17_{11}}$ → Proporción total mujeres NO conductoras

PREGUNTA N°2

Datos:

$V_B = 6,44 \frac{km}{h}$

$V_R = 3,22 \frac{km}{h}$



$\vec{V_B} = V_B \cos\alpha \hat{i} + V_B \operatorname{sen}\alpha \hat{j}$

$\vec{V_R} = -V_R \hat{j}$ * velocidad del bote con respecto al río

$\vec{V_{BR}} = V_B \cos\alpha \hat{i} + (V_B \operatorname{sen}\alpha - V_R)\hat{j} = V_B \cos\alpha \hat{i}$

luego: $V_B \operatorname{sen}\alpha - V_R = 0$

$V_B \operatorname{sen}\alpha = V_R$

$\operatorname{sen}\alpha = \frac{V_R}{V_B} = 0,5$

$\boxed{\alpha = 30°}$

$$t = \frac{d}{V_{Bx}} \rightarrow t = \frac{6,44}{6,44\cos(30)} = 1,154$$

$$\boxed{t = 1,15 \text{ hrs}}$$

$$t_1 = \frac{d}{V_B + V_R} \rightarrow t_1 = \frac{3,22}{6,44+3,22} = \frac{3,22}{9,66} = \frac{1}{3}$$

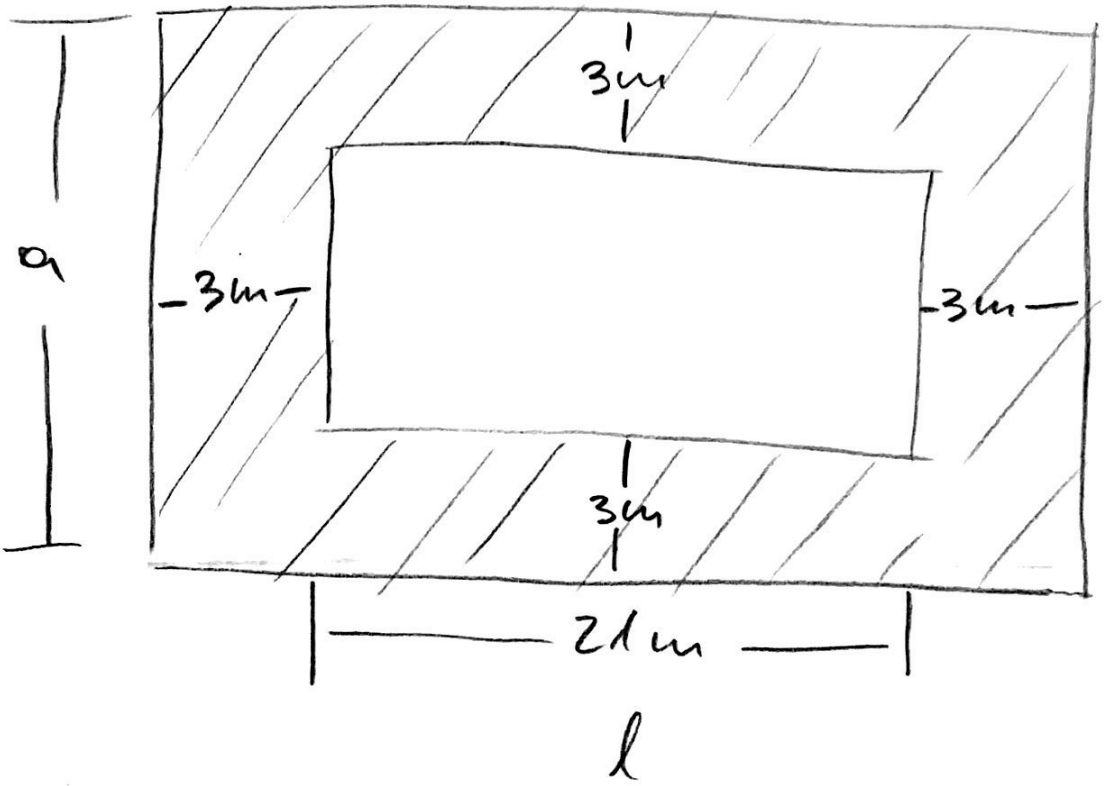
$$\boxed{t_1 = \frac{1}{3} \text{ hr} \rightarrow t_1 = 20 \text{ min}}$$

$$t_2 = \frac{d}{V_B - V_R} = \frac{3,22}{6,44-3,22} = \frac{3,22}{3,22} = 1$$

$$\boxed{t_2 = 1 \text{ hr}} \qquad t_1 + t_2 = t_{TOTAL}$$

$$\boxed{t_{TOTAL} = 1 \text{ hr } 20 \text{ min}}$$

PREGUNTA N° 3

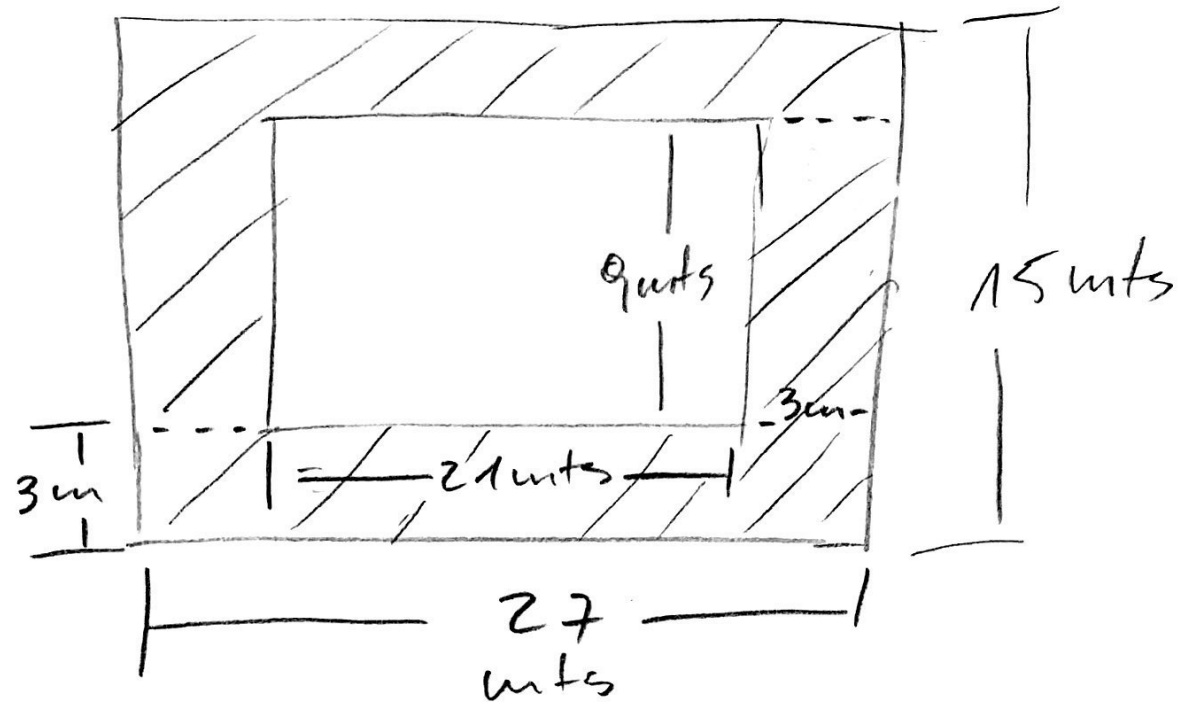


$l : a = 7 : 3$

$21 : a = 7 : 3$

$$a = \frac{21 \cdot 3}{7} = 9$$

$\boxed{a = 9 \text{ unts}}$



Área a pintar:

$27 \cdot 15 - 21 \cdot 9 = 405 - 189$

$$\boxed{A = 216\ m^2}$$

$$\frac{2 \cdot 216}{10} = \frac{x}{1} \rightarrow x = \frac{2 \cdot 216}{10} = \underline{43,2}$$

$$\boxed{N^{\circ}\ \text{Galones} = 44\ \text{galones}}$$