

	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

$$c) \frac{16}{14} = \frac{8}{7} \quad \rightarrow \text{Proporción total de no conductores}$$

$$d) \frac{4}{20} = \frac{x}{100} \quad x = \frac{4 \cdot 100}{20} \quad \boxed{x = 20\%}$$

→ Hombres NO conductores

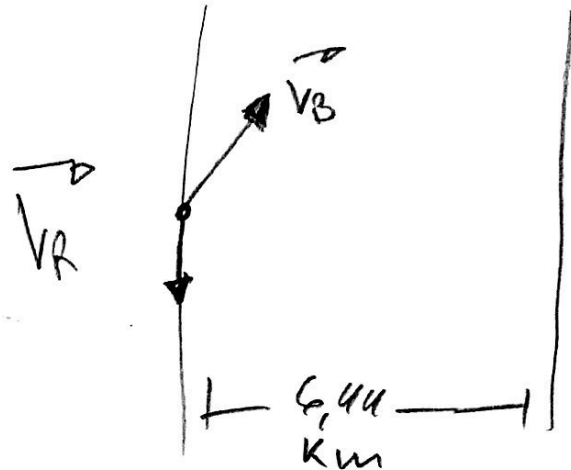
e) $\frac{2}{17}$ $\rightarrow$ Proporción total mujeres no conductoras

PREGUNTA N° 2

Datos:

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

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



$$\vec{V}_B = V_B \cos \alpha \hat{i} + V_B \sin \alpha \hat{j}$$

$$\vec{V}_R = -V_R \hat{j} \quad * \text{Velocidad del bote con respecto al río}$$

$$\vec{V}_{BR} = V_B \cos \alpha \hat{i} + (V_B \sin \alpha - V_R) \hat{j} = V_B \cos \alpha \hat{i}$$

$$\text{Luego: } V_B \sin \alpha - V_R = 0$$

$$V_B \sin \alpha = V_R$$

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

$$\boxed{\alpha = 30^\circ}$$

$$t = \frac{d}{V_{BX}} \rightarrow t = \frac{6,44}{6,44 \cos(30)} = 1,1547$$

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

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

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

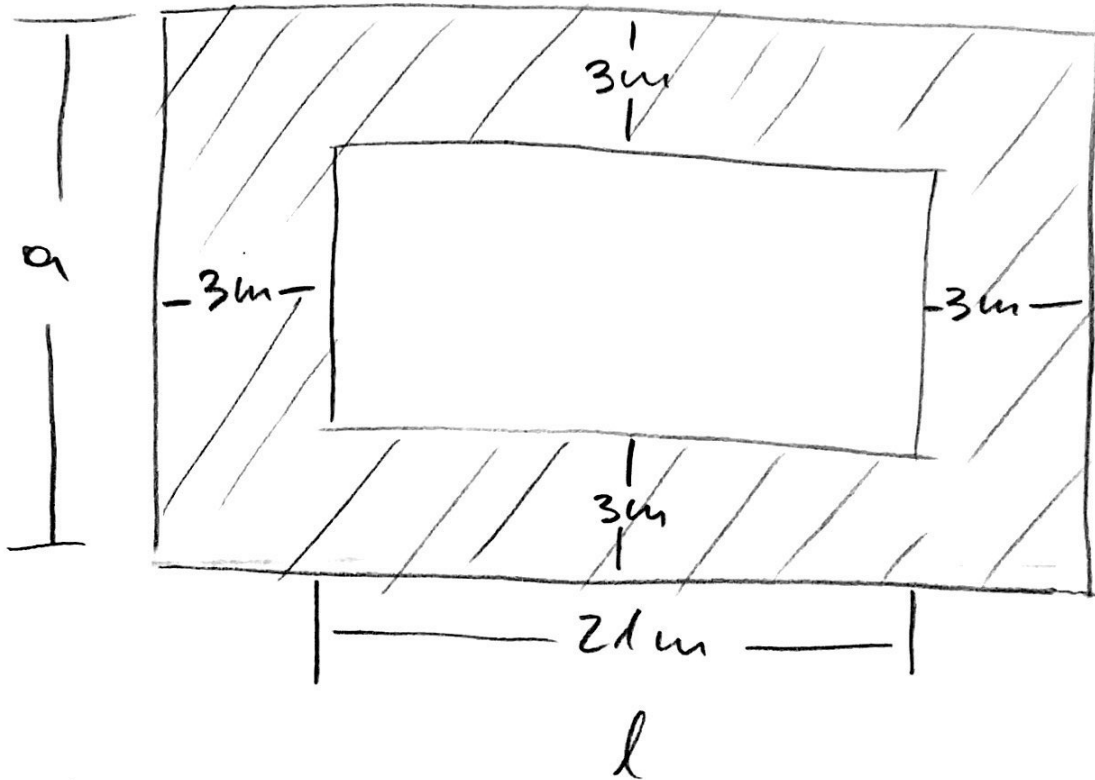
$$t_2 = \frac{d}{V_B - V_R} = \frac{3,22}{6,44 - 3,22} = \frac{3,22}{3,22} = 1$$

$$t_2 = 1 \text{ hr}$$

$$t_1 + t_2 = t_{\text{TOTAL}}$$

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

PREGUNTA N° 3

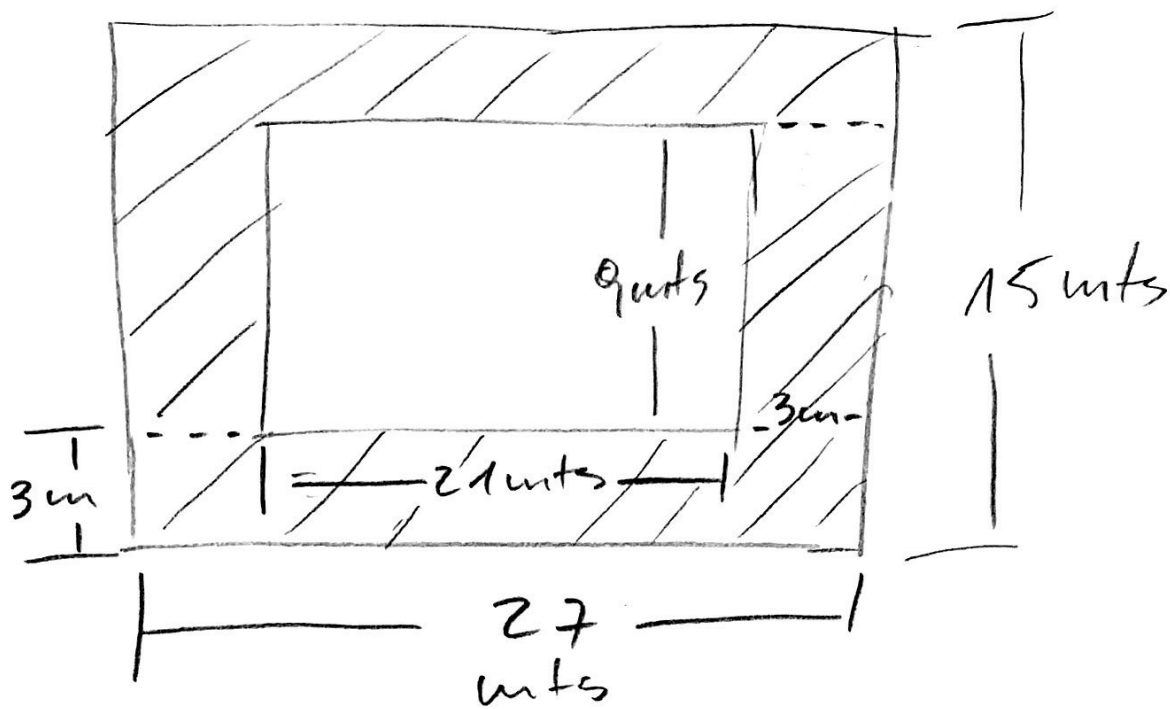


$$l : a = 7 : 3$$

$$21 : a = 7 : 3$$

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

$$a = 9 \text{ mts}$$



Área a pintar:

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

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

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

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