Aritmética

El 2 por 3 = $\frac{2}{3}$

El 7 por 23 = $\frac{7}{23}$

El 1 por 100 = $\frac{1}{100}$

El 3 por 100 = $\frac{3}{100}$

$\frac{1}{100} = \%$

$4\% \quad 4 \cdot \frac{1}{100} = \frac{4}{100}$

Juan Carlos Vera Yovera

* Obv.

El 100 por 100 = $\frac{100}{100}$ = 1

100%

* $100 \cdot \frac{1}{100}$

$N = \underbrace{100\%}\, N$

$\underbrace{a} + 20\% a$

$100\% a + 20\% a = 120\% a$

$\underbrace{P_c} + 20\% P_c =$

$100\% P_c + 20\% P_c = 120\% P_c$

$X + 20\% X =$

$D_u = \left[a + b - \frac{a \times b}{100}\right]\%$

$\underbrace{20+10} - \frac{20 \cdot 10}{100}$

$\underbrace{30 - 2}$

$\boxed{D_u = 28\%}$

$\cdot A_u = \left[a + b + \frac{a \times b}{100}\right]\%$

$\underbrace{30 + 2}$

$A_u = 32\%$

$120\% \cdot 110\%$

$\frac{120 \cdot 110}{100}\% = 132\%$

$P_v = P_c + g$ BOLSA — G NETO / G BRUTO

$P_v = P_c - D$

$P_v = P_c - P$

$g = x\% P_c$

$D = y\% P_c$

$P = w\% P_c$

* MEZCLAS

A_1 $P_1 = 4$ 12 — 30kg 3K

A_2 $P_2 = 4/3$ 6 — 20kg 2K

A_3 $P_3 = 4/2$ 10 — 50kg 5K

costo total.

120 +

60

100

$ 280

CANTIDAD TOTAL

100kg

P_{mezcla}

P_{costo}

P_v

g

$\cdot P$

$P_{MEZCLA} = \frac{280}{100} = S/2,8$

$P_{costo} : P.equilibrio = S/2,8$

$P_V = X$

$g = 20\%.P_C$

$P_V = P_C + g$

$P_V = P_C + 20\%.P_C$

$P_V = 120\%.P_C$

$P_V = \frac{120}{100}.2,8 = S/3,36$

$\bullet\ P_M = \frac{P_1C_1 + P_2C_2 + P_3C_3}{C_1 + C_2 + C_3}$

GRADO MEZCLA: % <> °

40% <> 40°

$G_{MEZCLA\ Alcoholica} = \frac{V_{Alcohol\ Puro}.100\%}{V_{TOTAL\ DE\ LA\ MEZCLA}}$

30 Lt Alcohol Puro + 70 Lt H_2O → Vt 100 Lt

$G_M^\circ = \frac{30}{100} \times 100\% = 30° <> 30\%$

50° (40 Lt) 30° (30 Lt) 60° (30 Lt)

$G_{MEDIO\ MEZCLA} = \frac{40.50 + 30.30 + 30.60}{100}$

$\frac{2004.90 + 180}{10} = 47°$

ALEACIONES

$Ley = \frac{\text{CANTIDAD TOTAL METAL FINO}}{\text{CANTIDAD TOTAL DE LA MEZCLA}}$

100°

Au ; Cu

30gr | 20gr

$Ley = \frac{30}{50} = \frac{3}{5} = 0,600$

600

·METAL FINO.

Oro, plata, platino

$Liga = \frac{90}{50} = \frac{2}{5} = 0,4$

·METAL ORDINARIO.

400 mil

Fierro, Cobre, Zinc.

$\frac{3}{5} + \frac{2}{5} = 1$

$Ley + Liga = 1$

4 gr | 3 gr | 3 gr

ley: 200mil | ley: 100mil | ley: 300mil

$Ley_{MEDIO} = \frac{800 + 700 + 600}{10}$

$= \frac{2100}{100} = 170$

$Ley_{MEDIO} = 0,17$

Aritmética

Sol (I)

$20\% N = 40\% \cdot 5\% \cdot 600$

$\frac{20}{100} \cdot N = \frac{40}{100} \times \frac{5}{100} \times 600$

$\boxed{N = 60}$ ✓

Juan Carlos Vera Yovera.

S (1)

$20\% N = 40\% \cdot 5\% \cdot 600$

$\frac{20}{100} \cdot N = \frac{40}{100} \times \frac{5}{100} \cdot 600$

$N = 60$

S (2)

$x\% (0{,}04) = 0{,}0028$

$\frac{x}{100} \cdot \frac{4}{100} = \frac{28}{10000}$

$x = 7.$

S (3)

$A = \frac{3}{5} \cdot \frac{2}{1000} \cdot 160\,000 = 120$

$B = \frac{5}{6} \cdot \frac{3}{1000} \cdot 40\,000 = 100$

$\frac{10}{100}(220) = 22.$

S (4)

$x + 30\% x = \$260$

$100\% + 30\% x = 260$

$130\% x = 260$

$\frac{x}{100} = 2$

$x = 200$ ✓

Sol (6)

$D_1 = 10\%$: 90%

$D_2 = 20\%$: 80%

$D_3 = 30\%$ 70%

$= 90\% \cdot 80\% \cdot 70\%$

$\Rightarrow 50{,}4\%$

$100\% - 50.4\% = 49{,}6\%.$

S (5)

$x - 40\% x =$

$100\% x - 40\% x = 12$

$60\% x = 12$

$\frac{60}{100} \cdot x = 12$

$\boxed{x = 20}$.

Sol (7). $P_V = P_C - P$

$P_V = \$120.$

$P_C = \$150$

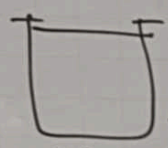
$P = 30$

$\frac{30}{150} \times 100\%$

20%

Sol

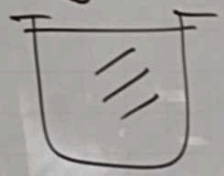
Sol (16)



MEZCLA
80 LT
g = 60%

V. Alcohol = 60% 80
V. Alcohol = 48 LT
V. Agua = 32 LT

X LT (H2O)



GMEZCLA:

$$20\% = \frac{48}{80+X} \cdot \frac{5}{100}$$

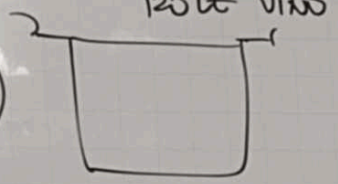
$$32+X = 240$$

$$X = 240$$

$$80 + x = 240$$

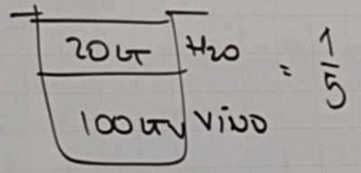
$$x = 160.$$

Sol (25)

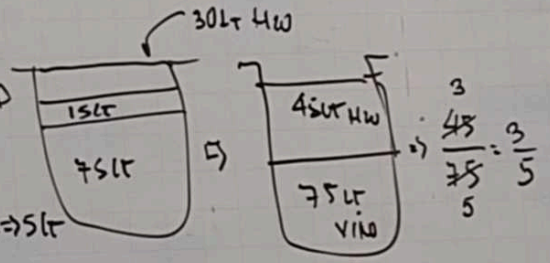


120 LT VINO

1° EXTRAE: 20 VINO



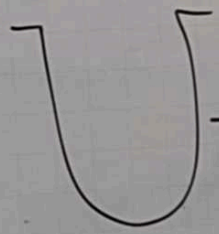
$= \frac{1}{5}$



$\Rightarrow \frac{45}{75} = \frac{3}{5}$

MEZCLA 30 LT
1K ⇒ 5 LT
5K ⇒ 25 LT

6K = 30 LT
K = 5 LT



→ 40 LT
3K ⇒ 15 /
5K ⇒ 25 /

Volumen Final ⇒ 50 LT Vino

8K = 40
K = 5