

F : Note de Français

M : Note de Maths

C : Note de Culture Générale.

on a: $F + M + C = 37$ (Somme des 3 notes = 37)

$$(1) \left\{ \begin{array}{l} \frac{(F+4) + (M+3) + (C+2)}{4+3+2} = 12 \quad (\text{Moyenne obtenue} = 12) \\ \\ \end{array} \right.$$

$$C = M + 8 \quad (8 \text{ pts de plus en CG qu'en Maths})$$

on a donc un système de 3 équations à 3 inconnues

$$(1) \Leftrightarrow \left\{ \begin{array}{l} F = 37 - M - C \\ C = M + 8 \\ \frac{(F+4) + (M+3) + (C+2)}{9} = 12 \end{array} \right. \Leftrightarrow \left\{ \begin{array}{l} C = M + 8 \\ F = 37 - M - (M + 8) \\ 4F + 3M + 2C = 12 \times 9 = 108 \end{array} \right.$$

$$\Leftrightarrow \left\{ \begin{array}{l} C = M + 8 \\ F = 37 - 2M - 8 = 29 - 2M \\ 4(29 - 2M) + 3M + 2(M + 8) = 108 \end{array} \right. \Leftrightarrow \left\{ \begin{array}{l} C = M + 8 \\ F = 29 - 2M \\ 116 - 8M + 3M + 2M + 16 = 108 \end{array} \right.$$

$$\Leftrightarrow \left\{ \begin{array}{l} C = M + 8 \\ F = 29 - 2M \\ 132 - 3M = 108 \end{array} \right. \Leftrightarrow \left\{ \begin{array}{l} 3M = 132 - 108 \\ C = M + 8 \\ F = 29 - 2M \end{array} \right. \Leftrightarrow \left\{ \begin{array}{l} M = \frac{24}{3} = 8 \\ C = 8 + 8 = 16 \\ F = 29 - (2 \times 8) \\ = 29 - 16 = 13 \end{array} \right.$$

Julie a eu

13 en Français
8 en Maths
16 en Culture Générale

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