

Calcul Littéral

Professeur : M. BA

Classe : 4 M2

Durée : 10 minutes

Note : /5

Nom de l'élève : _____

Question 1: (1,5 points)

$$\begin{aligned} A &= -2 - 6 - 2 + 5 \\ &= (-2 - 6 - 2) + 5 \\ &= -10 + 5 \\ &= -5 \end{aligned}$$

$$\begin{aligned} B &= -12 + 11 - 8 + 12 \\ &= (-12 - 8) + (11 + 12) \\ &= -20 + 23 \\ &= 3 \end{aligned}$$

$$\begin{aligned} C &= -9 - 15 + 6 - 21 \\ &= (-9 - 15 - 21) + 6 \\ &= -45 + 6 \\ &= -39 \end{aligned}$$

Question 2: (1,5 points)

$$\begin{aligned} D &= (-2) \times (-7) + 5 \\ &= 14 + 5 \\ &= 19 \end{aligned}$$

$$\begin{aligned} E &= -15 + (5) \times (-9) + 9 \\ &= -15 + (-45) + 9 \\ &= -60 + 9 \\ &= -51 \end{aligned}$$

$$\begin{aligned} F &= 2 - (-11) \times (7) - 15 + 2 + (-10) \times (4) \\ &= 2 - (-77) - 15 + 2 + (-40) \\ &= 2 + 77 - 15 + 2 - 40 \\ &= 81 - 55 \\ &= 26 \end{aligned}$$

Question 3: (2 points)

$$\begin{aligned} G &= -\frac{7}{5} + \frac{9}{10} - \frac{12}{5} + \frac{4}{10} \\ &= \left(-\frac{7}{5} - \frac{12}{5}\right) + \left(\frac{9}{10} + \frac{4}{10}\right) \\ &= -\frac{19}{5} + \frac{13}{10} \\ &= -\frac{19 \times 2}{10} + \frac{13}{10} = \frac{-38 + 13}{10} \\ &= -\frac{25}{10} \\ &= -\frac{5}{2} \end{aligned}$$

$$\begin{aligned} H &= -\frac{7}{3} \times \frac{9}{2} - \frac{12}{4} \times \frac{4}{9} \\ &= -\frac{7 \times 9}{3 \times 2} - \frac{12 \times 4}{4 \times 9} \\ &= -\frac{63}{6} - \frac{48}{36} \quad (\text{Simplification :}) \\ &= -\frac{21}{2} - \frac{4}{3} \quad (\text{Dénominateur commun 6}) \\ &= -\frac{21 \times 3}{2 \times 3} - \frac{4 \times 2}{3 \times 2} \\ &= -\frac{63}{6} - \frac{8}{6} \\ &= -\frac{63 + 8}{6} \\ &= -\frac{71}{6} \end{aligned}$$