

EXERCICE 1

Donner le résultat en écriture fractionnaire :

$A = \frac{21}{100} + \frac{65}{100} + \frac{142}{100}$ $A = \frac{228}{100} = \frac{57 \times 4}{25 \times 4} = \frac{57}{25}$	$B = \frac{7}{2} + \frac{5}{2} + \frac{9}{2}$	$C = \frac{11}{5} + \frac{7}{5} + \frac{23}{5}$	$D = \frac{13}{12} + \frac{1}{12} + \frac{5}{12}$
$E = \frac{7}{10} - \frac{3}{10} + \frac{6}{10}$	$F = \frac{7}{3} - \frac{2}{3} - \frac{4}{3}$	$G = \frac{25}{11} - \frac{13}{11} + \frac{5}{11} - \frac{10}{11}$	$H = \frac{39}{49} - \frac{12}{49} + \frac{71}{49} - \frac{63}{49}$

EXERCICE 2

Donner le résultat en écriture fractionnaire :

$A = \frac{2 \times 10}{10 \times 10} + \frac{65}{100} + \frac{4 \times 10}{10 \times 10}$ $A = \frac{20 + 65 + 40}{100}$ $A = \frac{125}{100} = \frac{5 \times 25}{4 \times 25} = \frac{5}{4}$	$B = \frac{1}{2} + \frac{5}{4} + \frac{7}{2}$	$C = \frac{10}{3} + \frac{5}{6} + \frac{19}{12}$	$D = \frac{5}{2} + \frac{11}{18} + \frac{5}{3}$
$E = \frac{13}{10} - \frac{45}{100} + 2$	$F = 1 + \frac{7}{3} - \frac{2}{15} - \frac{4}{5}$	$G = 3 - \frac{1}{30} + \frac{1}{5} - \frac{1}{3}$	$H = \frac{7}{2} - 2 - \frac{4}{6} - \frac{1}{12}$

EXERCICE 3

Calculer en respectant les priorités et en donnant le résultat en écriture fractionnaire :

$A = \frac{4}{7} - \left(\frac{6}{7} - \frac{5}{7} \right) + \frac{1}{7}$	$B = \frac{19}{4} - \left[\frac{1}{2} - \left(\frac{3}{8} - \frac{1}{4} \right) \right]$	$C = \left(\frac{7}{12} - \frac{1}{6} \right) - \left(\frac{3}{4} - \frac{1}{3} \right)$	$D = \frac{3}{10} - \left(\frac{97}{100} - 0,8 \right)$
$E = \frac{14}{30} - \left(\frac{1}{5} - \frac{1}{6} \right)$	$F = \frac{24}{15} - \left[\frac{2}{3} - \left(\frac{11}{5} - 2 \right) \right]$	$G = \left(\frac{750}{100} - 3 \right) - \left(5 - \frac{43}{10} \right)$	$H = 1 - \left(\frac{25}{42} - \frac{2}{7} \right) + \frac{5}{3}$

CORRIGE - M. QUET

EXERCICE 1

$A = \frac{21}{100} + \frac{65}{100} + \frac{142}{100}$ $A = \frac{228}{100} = \frac{57 \times 4}{25 \times 4} = \frac{57}{25}$	$B = \frac{7}{2} + \frac{5}{2} + \frac{9}{2}$ $B = \frac{21}{2}$	$C = \frac{11}{5} + \frac{7}{5} + \frac{23}{5}$ $C = \frac{41}{5}$	$D = \frac{13}{12} + \frac{1}{12} + \frac{5}{12}$ $D = \frac{19}{12}$
$E = \frac{7}{10} - \frac{3}{10} + \frac{6}{10}$ $E = \frac{10}{10} = 1$	$F = \frac{7}{3} - \frac{2}{3} - \frac{4}{3}$ $F = \frac{1}{3}$	$G = \frac{25}{11} - \frac{13}{11} + \frac{5}{11} - \frac{10}{11}$ $G = \frac{7}{11}$	$H = \frac{39}{49} - \frac{12}{49} + \frac{71}{49} - \frac{63}{49}$ $H = \frac{35}{49} = \frac{\boxed{7} \times 5}{\boxed{7} \times 7} = \frac{5}{7}$

EXERCICE 2

$A = \frac{2 \times 10}{10 \times 10} + \frac{65}{100} + \frac{4 \times 10}{10 \times 10}$ $A = \frac{20 + 65 + 40}{100}$ $A = \frac{125}{100} = \frac{5 \times 25}{4 \times 25} = \frac{5}{4}$	$B = \frac{1}{2} + \frac{5}{4} + \frac{7}{2}$ $B = \frac{1 \times 2}{2 \times 2} + \frac{5}{4} + \frac{7 \times 2}{2 \times 2}$ $B = \frac{2 + 5 + 14}{4}$ $B = \frac{21}{4}$	$C = \frac{10}{3} + \frac{5}{6} + \frac{19}{12}$ $C = \frac{10 \times 4}{3 \times 4} + \frac{5 \times 2}{6 \times 2} + \frac{19}{12}$ $C = \frac{40 + 10 + 19}{12}$ $C = \frac{69}{12} = \frac{\boxed{3} \times 23}{\boxed{3} \times 4} = \frac{23}{4}$	$D = \frac{5}{2} + \frac{11}{18} + \frac{5}{3}$ $D = \frac{5 \times 9}{2 \times 9} + \frac{11}{18} + \frac{5 \times 6}{3 \times 6}$ $D = \frac{45 + 11 + 30}{18}$ $D = \frac{86}{18} = \frac{\boxed{2} \times 43}{\boxed{2} \times 9} = \frac{43}{9}$
$E = \frac{13}{10} - \frac{45}{100} + 2$ $E = \frac{13 \times 10}{10 \times 10} - \frac{45}{100} + \frac{2 \times 100}{1 \times 100}$ $E = \frac{130 - 45 + 200}{100}$ $E = \frac{285}{100} = \frac{\boxed{5} \times 57}{\boxed{5} \times 20} = \frac{57}{20}$	$F = 1 + \frac{7}{3} - \frac{2}{15} - \frac{4}{5}$ $F = \frac{1 \times 15}{1 \times 15} + \frac{7 \times 5}{3 \times 5} - \frac{2}{15} - \frac{4 \times 3}{5 \times 3}$ $F = \frac{15 + 35 - 2 - 12}{15}$ $F = \frac{36}{15} = \frac{\boxed{3} \times 12}{\boxed{3} \times 5} = \frac{12}{5}$	$G = 3 - \frac{1}{30} + \frac{1}{5} - \frac{1}{3}$ $G = \frac{3 \times 30}{1 \times 30} - \frac{1}{30} + \frac{1 \times 6}{5 \times 6} - \frac{1 \times 10}{3 \times 10}$ $G = \frac{90 - 1 + 6 - 10}{30}$ $G = \frac{85}{30} = \frac{\boxed{5} \times 17}{\boxed{5} \times 6} = \frac{17}{6}$	$H = \frac{7}{2} - 2 - \frac{4}{6} - \frac{1}{12}$ $H = \frac{7 \times 6}{2 \times 6} - \frac{2 \times 12}{1 \times 12} - \frac{4 \times 2}{6 \times 2} - \frac{1}{12}$ $H = \frac{42 - 24 - 8 - 1}{12}$ $H = \frac{9}{12} = \frac{\boxed{3} \times 3}{\boxed{3} \times 4} = \frac{3}{4}$

EXERCICE 3

$A = \frac{4}{7} - \left(\frac{6}{7} - \frac{5}{7} \right) + \frac{1}{7}$ $A = \frac{4}{7} - \frac{1}{7} + \frac{1}{7}$ $A = \frac{4}{7}$	$B = \frac{19}{4} - \left[\frac{1}{2} - \left(\frac{3}{8} - \frac{1}{4} \right) \right]$ $B = \frac{19}{4} - \left[\frac{1}{2} - \left(\frac{3}{8} - \frac{1 \times 2}{4 \times 2} \right) \right]$ $B = \frac{19}{4} - \left[\frac{1}{2} - \left(\frac{3}{8} - \frac{2}{8} \right) \right]$ $B = \frac{19}{4} - \left(\frac{1 \times 4}{2 \times 4} - \frac{1}{8} \right)$ $B = \frac{19}{4} - \left(\frac{4}{8} - \frac{1}{8} \right)$ $B = \frac{19 \times 2}{4 \times 2} - \frac{3}{8}$ $B = \frac{38}{8} - \frac{3}{8}$	$C = \left(\frac{7}{12} - \frac{1}{6} \right) - \left(\frac{3}{4} - \frac{1}{3} \right)$ $C = \left(\frac{7}{12} - \frac{1 \times 2}{6 \times 2} \right) - \left(\frac{3 \times 3}{4 \times 3} - \frac{1 \times 4}{3 \times 4} \right)$ $C = \left(\frac{7}{12} - \frac{2}{12} \right) - \left(\frac{9}{12} - \frac{4}{12} \right)$ $C = \frac{5}{12} - \frac{5}{12}$ $C = 0$	$D = \frac{3}{10} - \left(\frac{97}{100} - 0,8 \right)$ $D = \frac{3}{10} - \left(\frac{97}{100} - \frac{0,8 \times 100}{1 \times 100} \right)$ $D = \frac{3}{10} - \left(\frac{97}{100} - \frac{80}{100} \right)$ $D = \frac{3 \times 10}{10 \times 10} - \frac{17}{100}$ $D = \frac{30}{100} - \frac{17}{100}$ $D = \frac{13}{100}$
--	--	---	--

$$B = \frac{35}{8}$$

$$E = \frac{14}{30} - \left(\frac{1}{5} - \frac{1}{6} \right)$$

$$E = \frac{14}{30} - \left(\frac{1 \times 6}{5 \times 6} - \frac{1 \times 5}{6 \times 5} \right)$$

$$E = \frac{14}{30} - \left(\frac{6}{30} - \frac{5}{30} \right)$$

$$E = \frac{14}{30} - \frac{1}{30}$$

$$E = \frac{13}{30}$$

$$F = \frac{24}{15} - \left[\frac{2}{3} - \left(\frac{11}{5} - 2 \right) \right]$$

$$F = \frac{24}{15} - \left[\frac{2}{3} - \left(\frac{11}{5} - \frac{2 \times 5}{1 \times 5} \right) \right]$$

$$F = \frac{24}{15} - \left[\frac{2}{3} - \left(\frac{11}{5} - \frac{10}{5} \right) \right]$$

$$F = \frac{24}{15} - \left[\frac{2}{3} - \frac{1}{5} \right]$$

$$F = \frac{24}{15} - \left[\frac{2 \times 5}{3 \times 5} - \frac{1 \times 3}{5 \times 3} \right]$$

$$F = \frac{24}{15} - \left(\frac{10}{15} - \frac{3}{15} \right)$$

$$F = \frac{24}{15} - \frac{7}{15}$$

$$F = \frac{17}{15}$$

$$G = \left(\frac{750}{100} - 3 \right) - \left(5 - \frac{43}{10} \right)$$

$$G = \left(\frac{750}{100} - \frac{300}{100} \right) - \left(\frac{50}{10} - \frac{43}{10} \right)$$

$$G = \frac{450}{100} - \frac{7 \times 10}{10 \times 10}$$

$$G = \frac{450}{100} - \frac{70}{100}$$

$$G = \frac{380}{100} = \frac{38}{10} = \frac{19}{5}$$

$$H = 1 - \left(\frac{25}{42} - \frac{2}{7} \right) + \frac{5}{3}$$

$$H = 1 - \left(\frac{25}{42} - \frac{2 \times 6}{7 \times 6} \right) + \frac{5}{3}$$

$$H = 1 - \left(\frac{25}{42} - \frac{12}{42} \right) + \frac{5}{3}$$

$$H = 1 - \frac{13}{42} + \frac{5}{3}$$

$$H = \frac{42}{42} - \frac{13}{42} + \frac{5 \times 14}{3 \times 14}$$

$$H = \frac{29}{42} + \frac{70}{42}$$

$$H = \frac{99}{42} = \frac{\boxed{3} \times 33}{\boxed{3} \times 14} = \frac{33}{14}$$