2nde : correction du TD (rappels sur les fractions)

I

Calculer et donner les résultats sous forme de fractions irréductibles :

$$A = \frac{-2}{3} - \frac{7}{5} = \frac{-2\times 5}{3\times 5} - \frac{7\times 3}{3\times 5} = \frac{-10-21}{15} = \frac{-31}{15} = \boxed{-\frac{31}{15}}$$

$$B = \frac{-15}{8} + \frac{4}{3} = \frac{-15\times 3}{8\times 3} + \frac{4\times 8}{3\times 8} = \frac{-45+32}{24} = \frac{-13}{24} = \boxed{-\frac{13}{24}}$$

$$C = 2 + \frac{7}{6} = \frac{12}{6} + \frac{7}{6} = \boxed{\frac{19}{6}}$$

$$D = 3 - \frac{3}{4} = \frac{12}{4} - \frac{3}{4} = \boxed{\frac{9}{4}}$$

II

Calculer et donner les résultats sous forme de fractions irréductibles :

$$A = \frac{\frac{2}{3}}{5}\frac{2}{3} \times \frac{1}{5} = \frac{2}{15}$$

$$B = \frac{2}{\frac{3}{5}} = 2 \times \frac{5}{3} = \frac{10}{3}$$

$$C = 7 \times \frac{5}{6} = \frac{7\times 5}{6} = \frac{35}{6}$$

$$D = \frac{1}{\frac{a}{b}} = \frac{b}{1} \ (b \neq 0) \text{ (inverse de la fraction } \frac{a}{b}\text{)}$$

$$E = \frac{\frac{1}{2} - \frac{1}{4}}{\frac{1}{4}} = \frac{\frac{2}{4} - \frac{1}{2}}{\frac{1}{4}} = \frac{\frac{1}{4}}{\frac{1}{4}} = \boxed{1} \text{ (quotient de deux nombres identiques)}$$

$$F = \frac{3}{4} - \frac{2}{3} \times \frac{9}{8} = \frac{3}{4} - \frac{2\times 9}{3\times 8} = \frac{3}{4} - \frac{\cancel{2}\times\cancel{3}\times 3}{\cancel{3}\times\cancel{2}\times 4} = \frac{3}{4} - \frac{3}{4} = \boxed{0} \text{ (différence de deux nombres égaux)}$$

$$G = 5 \times \frac{1-\frac{1}{2}}{3} = 5 \times \frac{\frac{2}{2}-\frac{1}{2}}{3} = 5 \times \frac{\frac{1}{2}}{3} = 5 \times \frac{1}{2} \times \frac{1}{3} = \boxed{\frac{5}{6}}$$

$$H = \frac{2+3}{2\times 5} = \frac{\cancel{5}}{2\times\cancel{5}} = \boxed{2}$$