

Exercice 1.

$$A = \frac{3}{5} + \frac{2}{3} = \frac{9}{15} + \frac{10}{15} = \underline{\frac{19}{15}}$$

$$B = \frac{-5}{8} - \frac{2}{5} = \frac{-25}{40} - \frac{16}{40} = \underline{\frac{-41}{40}}$$

$$C = \frac{7}{4} - \frac{7}{8} = \frac{14}{8} - \frac{7}{8} = \underline{\frac{7}{8}}$$

$$D = \frac{7}{5} \times \frac{4}{3} = \frac{7 \times 4}{5 \times 3} = \underline{\frac{28}{15}}$$

$$E = \frac{21}{5} \div \frac{15}{7} = \frac{21 \times 7}{5 \times 15} = \frac{7 \times 3 \times 7}{5 \times 3 \times 5} = \underline{\frac{7}{5}}$$

$$F = \frac{8}{5} \div \frac{9}{3} = \frac{8}{5} \times \frac{3}{9} = \frac{8 \times 3}{5 \times 3 \times 3} = \underline{\frac{8}{15}}$$

$$G = \frac{7}{\frac{14}{18}} = \frac{7}{6} \times \frac{18}{14} = \frac{7 \times 18}{6 \times 14} = \frac{7 \times 6 \times 3}{6 \times 7 \times 2} = \underline{\frac{3}{2}}$$

Exercice 2

$$H = \frac{2}{5} - \frac{1}{3} \times \frac{16}{5} = \frac{2}{5} - \frac{1 \times 16}{3 \times 5} = \frac{2}{5} - \frac{16}{15} = \frac{6}{15} - \frac{16}{15} = \frac{-10}{15} = \frac{2 \times 5}{3 \times 5} = \underline{\frac{-2}{3}}$$

$$\begin{aligned} I &= \frac{9}{4} - \frac{5}{4} \div \frac{15}{8} = \frac{9}{4} - \frac{5}{4} \times \frac{8}{15} = \frac{9}{4} - \frac{5 \times 8}{4 \times 15} \\ &= \frac{9}{4} - \frac{2 \times 2 \times 2 \times 2}{2 \times 2 \times 3 \times 5} = \frac{9}{4} - \frac{2}{3} = \frac{27 - 8}{12} = \underline{\frac{19}{12}} \end{aligned}$$

$$J = \frac{\frac{7}{2} - \frac{4}{3}}{1 + \frac{7}{18}} = \frac{\frac{21 - 8}{6}}{\frac{18 + 17}{18}} = \frac{\frac{13}{6}}{\frac{25}{18}} = \frac{13}{6} \times \frac{18}{25} = \frac{13 \times 18}{6 \times 25}$$

$$= \frac{13 \times 6 \times 3}{6 \times 5 \times 5} = \frac{39}{25}$$

Exercice 3

1) Thomas a mangé $\frac{1}{4} \times \frac{5}{6} = \frac{5}{24}$ de la tablette

2) $\left\{ \begin{array}{l} \text{Thomas } \frac{5}{24} \\ \text{Léo } \frac{3}{8} \end{array} \right.$ donc Vincent a mangé $1 - \left(\frac{5}{24} + \frac{3}{8} \right)$

$$= 1 - \left(\frac{5+9}{24} \right)$$

$$= 1 - \frac{14}{24}$$

$$= \frac{24-14}{24} = \frac{10}{24} = \frac{5}{12}$$

Vincent a mangé $\frac{5}{12}$ de la tablette.

3)

$\frac{2}{3}$ représente 80g

donc $x = 80 \div \left(\frac{2}{3} \right)$

1 représente x

$$= 80 \times \frac{3}{2} = \frac{240}{2} = 120$$

La plaquette pèse 120g.

Correction Test 12 - Fractions U_A

Exercice 1

$$A = \frac{3}{4} + \frac{1}{3} = \frac{9+4}{12} = \underline{\underline{\frac{13}{12}}}$$

$$B = \frac{-5}{8} - \frac{2}{5} = \frac{-25-16}{40} = \underline{\underline{\frac{-41}{40}}}$$

$$C = \frac{7}{3} - \frac{7}{6} = \frac{14-7}{6} = \underline{\underline{\frac{7}{6}}}$$

$$D = \frac{7}{4} \times \frac{2}{3} = \frac{7 \times 2}{4 \times 3} = \frac{7 \times \cancel{2}}{\cancel{2} \times 2 \times 3} = \underline{\underline{\frac{7}{6}}}$$

$$E = \frac{28}{5} \times \frac{25}{7} = \frac{28 \times 25}{5 \times 7} = \frac{\cancel{7} \times 4 \times \cancel{5} \times 5}{\cancel{5} \times \cancel{7}} = \underline{\underline{20}}$$

$$F = \frac{8}{3} = \frac{9}{4} = \frac{8}{3} \times \frac{4}{9} = \underline{\underline{\frac{32}{27}}}$$

$$G = \frac{\frac{5}{2}}{\frac{15}{12}} = \frac{5}{6} \times \frac{12}{15} = \frac{\cancel{5} \times \cancel{6} \times 2}{\cancel{5} \times \cancel{3} \times 3} = \underline{\underline{\frac{2}{3}}}$$

Exercice 2

$$\begin{aligned} H &= \frac{2}{3} - \frac{1}{3} \times \frac{16}{7} \\ &= \frac{2}{3} - \frac{16}{21} \\ &= \frac{14-16}{21} = \underline{\underline{\frac{-2}{21}}} \end{aligned}$$

$$\begin{aligned} I &= \frac{9}{2} - \frac{5}{2} : \frac{15}{8} \\ &= \frac{9}{2} - \frac{5 \times 8}{2 \times 15} \\ &= \frac{9}{2} - \frac{\cancel{5} \times 4 \times \cancel{2}}{\cancel{2} \times \cancel{5} \times 3} \\ &= \frac{9}{2} - \frac{4}{3} \\ &= \frac{27-8}{6} \\ &= \underline{\underline{\frac{19}{6}}} \end{aligned}$$

$$\begin{aligned} J &= \frac{\frac{7}{4} - \frac{4}{3}}{1 + \frac{7}{8}} \\ &= \frac{\frac{21-16}{12}}{\frac{8+7}{8}} \\ &= \frac{5}{12} \times \frac{8}{15} \\ &= \frac{\cancel{5} \times \cancel{4} \times 2}{\cancel{4} \times 3 \times \cancel{5} \times 3} \\ &= \underline{\underline{\frac{2}{9}}} \end{aligned}$$