Fiche d'exercice sur les Fractions n°4 – Collège (3ème – 4ème)

Multiplication de fractions avec des dénominateurs différents (Facile)

$A = \frac{2}{3} \times \frac{4}{5}$ $B = \frac{5}{7} \times \frac{3}{4}$ $C = \frac{1}{6} \times \frac{7}{8}$ $D = \frac{3}{5} \times \frac{2}{9}$ $E = \frac{4}{7} \times \frac{5}{6}$ $F = \frac{8}{3} \times \frac{5}{11}$ $G = \frac{9}{10} \times \frac{3}{7}$ $H = \frac{7}{12} \times \frac{5}{8}$

Somme de fractions avec des dénominateurs différents (Moyen ++)

1) $\frac{4}{7} + \frac{5}{35} = ...$
2) $\frac{2}{5} + \frac{4}{10} = ...$
3) $\frac{1}{7} + \frac{3}{14} = ...$
4) $\frac{6}{7} + \frac{3}{14} = ...$
5) $\frac{2}{5} + \frac{3}{10} = ...$
6) $\frac{1}{7} + \frac{7}{21} = ...$
7) $\frac{4}{5} + \frac{3}{10} = ...$
8) $\frac{5}{7} + \frac{8}{21} = ...$

Calculs un peu plus complexes de fraction (Difficile)

1) $\frac{11}{5} - \frac{10}{5} \times \frac{3}{4}$
2) $\frac{3}{5} - \frac{2}{5} \times \frac{9}{4}$
3) $\frac{7}{5} - \frac{6}{5} \times \frac{7}{4}$
4) $\frac{3}{5} - \frac{2}{5} \times \frac{7}{4}$
5) $\frac{3}{5} - \frac{2}{5} \times \frac{3}{4}$
6) $\frac{11}{5} - \frac{10}{5} \times \frac{7}{4}$
7) $\frac{7}{5} - \frac{6}{5} \times \frac{9}{4}$
8) $\frac{7}{5} - \frac{6}{5} \times \frac{3}{4}$

Calculs complexes de fraction (Difficile +)

1) $A = \frac{-5}{-9} + \frac{1}{-9} \times \frac{-1}{2}$
2) $B = \frac{5}{6} \times \frac{-7}{3} - \frac{-2}{3}$
3) $C = \frac{1}{9} - \frac{2}{9} \times \frac{5}{8}$
4) $D = \frac{-1}{6} \times \frac{7}{9} - \frac{-7}{9}$
5) $E = \frac{3}{-4} \times \frac{-1}{-9} + \frac{-2}{-9}$
6) $F = \frac{-1}{5} - \frac{-1}{5} \times \frac{-3}{7}$
7) $G = \frac{2}{9} \times \frac{7}{-7} - \frac{5}{-7}$
8) $H = \frac{-1}{-6} - \frac{6}{-6} \times \frac{-2}{-5}$
9) $I = \frac{5}{6} - \frac{5}{6} \times \frac{-7}{8}$
10) $J = \frac{-1}{-8} \times \frac{-2}{-7} + \frac{-3}{-7}$

1) $A = \frac{4}{7} \times \frac{-9}{10} - \frac{-3}{70}$
2) $B = \frac{-3}{45} - \frac{3}{5} \times \frac{-2}{9}$
3) $C = \frac{7}{3} - \frac{-2}{3} \times \frac{-1}{3}$
4) $D = \frac{4}{10} - \frac{-7}{10} \times \frac{-1}{7}$
5) $E = \frac{-2}{16} - \frac{3}{8} \times \frac{-1}{2}$
6) $F = \frac{-1}{9} \times \frac{5}{6} - \frac{-1}{54}$
7) $G = \frac{4}{5} \times \frac{-3}{7} - \frac{-2}{35}$
8) $H = \frac{-3}{36} - \frac{-4}{9} \times \frac{3}{4}$
9) $I = \frac{-4}{8} - \frac{-7}{8} \times \frac{3}{4}$
10) $J = \frac{-2}{63} + \frac{-5}{9} \times \frac{2}{7}$

1) $\frac{4}{5} - \frac{6}{35} + \frac{3}{5}$
2) $\frac{7}{9} + 3 \times \frac{9}{18}$
3) $\frac{2}{9} - 4$
4) $\frac{8}{3} - \left(\frac{7}{3} + \frac{1}{12}\right)$
5) $\frac{3}{4} - 5$
6) $\frac{5}{8} - \left(\frac{9}{64} + \frac{8}{8}\right)$
7) $\frac{3}{2} - \frac{5}{14} + \frac{9}{2}$
8) $\frac{4}{36} + 4 \times \frac{6}{4}$
9) $\frac{8}{6} - \frac{4}{18} + \frac{2}{6}$
10) $\frac{8}{5} - \left(\frac{1}{5} + \frac{6}{30}\right)$

Calculs plus complexes sur les fractions (Difficile ++)

1) Calculer $A = \frac{1}{6 - \frac{3}{5}}$.
2) Calculer $A = \frac{3}{2 - \frac{1}{5}}$.
3) Calculer $A = \frac{4}{4 - \frac{1}{2}}$.
4) Calculer $A = \frac{5}{4 - \frac{2}{5}}$.
5) Calculer $A = \frac{3}{2 - \frac{3}{5}}$.
6) Calculer $A = \frac{5}{2 - \frac{5}{7}}$.