

Corrigé de l'exercice 1

Effectuer les calculs suivants et donner le résultat sous la forme d'une fraction simplifiée :

$$A = 5 - \frac{7}{4}$$

$$A = \frac{5 \times 4}{1 \times 4} - \frac{7}{4}$$

$$A = \frac{13}{4}$$

$$B = \frac{14}{3} + \frac{1}{30}$$

$$B = \frac{14 \times 10}{3 \times 10} + \frac{1}{30}$$

$$B = \frac{141}{30}$$

$$B = \frac{47 \times 3}{10 \times 3}$$

$$B = \frac{47}{10}$$

$$C = \frac{13}{4} + \frac{10}{3}$$

$$C = \frac{13 \times 3}{4 \times 3} + \frac{10 \times 4}{3 \times 4}$$

$$C = \frac{79}{12}$$

$$D = \frac{6}{5} - \frac{5}{4}$$

$$D = \frac{6 \times 4}{5 \times 4} - \frac{5 \times 5}{4 \times 5}$$

$$D = \frac{-1}{20}$$

$$E = \frac{-13}{5} - \frac{9}{4}$$

$$E = \frac{-13 \times 4}{5 \times 4} - \frac{9 \times 5}{4 \times 5}$$

$$E = \frac{-97}{20}$$

$$F = \frac{14}{3} + \frac{-14}{5}$$

$$F = \frac{14 \times 5}{3 \times 5} + \frac{-14 \times 3}{5 \times 3}$$

$$F = \frac{28}{15}$$

$$G = \frac{-4}{9} - \frac{11}{6}$$

$$G = \frac{-4 \times 2}{9 \times 2} - \frac{11 \times 3}{6 \times 3}$$

$$G = \frac{-41}{18}$$

$$H = \frac{1}{15} + \frac{-5}{12}$$

$$H = \frac{1 \times 4}{15 \times 4} + \frac{-5 \times 5}{12 \times 5}$$

$$H = \frac{-21}{60}$$

$$H = \frac{-7 \times 3}{20 \times 3}$$

$$H = \frac{-7}{20}$$

Corrigé de l'exercice 2

Effectuer les calculs suivants et donner le résultat sous la forme d'une fraction simplifiée :

$$A = 4 + \frac{11}{6}$$

$$A = \frac{4 \times 6}{1 \times 6} + \frac{11}{6}$$

$$A = \frac{35}{6}$$

$$B = \frac{13}{3} - 1$$

$$B = \frac{13}{3} - \frac{1 \times 3}{1 \times 3}$$

$$B = \frac{10}{3}$$

$$C = \frac{11}{9} - \frac{3}{2}$$

$$C = \frac{11 \times 2}{9 \times 2} - \frac{3 \times 9}{2 \times 9}$$

$$C = \frac{-5}{18}$$

$$D = \frac{9}{4} + \frac{3}{5}$$

$$D = \frac{9 \times 5}{4 \times 5} + \frac{3 \times 4}{5 \times 4}$$

$$D = \frac{57}{20}$$

$$E = \frac{-1}{2} - \frac{-15}{7}$$

$$E = \frac{-1 \times 7}{2 \times 7} - \frac{-15 \times 2}{7 \times 2}$$

$$E = \frac{23}{14}$$

$$F = \frac{2}{3} + \frac{-3}{5}$$

$$F = \frac{2 \times 5}{3 \times 5} + \frac{-3 \times 3}{5 \times 3}$$

$$F = \frac{1}{15}$$

$$G = \frac{-9}{4} - \frac{-1}{10}$$

$$G = \frac{-9 \times 5}{4 \times 5} - \frac{-1 \times 2}{10 \times 2}$$

$$G = \frac{-43}{20}$$

$$H = \frac{-11}{10} + \frac{5}{4}$$

$$H = \frac{-11 \times 2}{10 \times 2} + \frac{5 \times 5}{4 \times 5}$$

$$H = \frac{3}{20}$$

Corrigé de l'exercice 3

Effectuer les calculs suivants et donner le résultat sous la forme d'une fraction simplifiée :

$$A = \frac{1}{2} + \frac{5}{8}$$

$$A = \frac{1 \times 4}{2 \times 4} + \frac{5}{8}$$

$$A = \frac{9}{8}$$

$$B = \frac{11}{3} - \frac{13}{6}$$

$$B = \frac{11 \times 2}{3 \times 2} - \frac{13}{6}$$

$$B = \frac{9}{6}$$

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

$$B = \frac{3}{2}$$

$$C = \frac{1}{3} + \frac{16}{5}$$

$$C = \frac{1 \times 5}{3 \times 5} + \frac{16 \times 3}{5 \times 3}$$

$$C = \frac{53}{15}$$

$$D = \frac{15}{2} - \frac{7}{9}$$

$$D = \frac{15 \times 9}{2 \times 9} - \frac{7 \times 2}{9 \times 2}$$

$$D = \frac{121}{18}$$

$$E = \frac{-1}{2} + \frac{-5}{9}$$

$$E = \frac{-1 \times 9}{2 \times 9} + \frac{-5 \times 2}{9 \times 2}$$

$$E = \frac{-19}{18}$$

$$F = \frac{4}{3} - \frac{-11}{2}$$

$$F = \frac{4 \times 2}{3 \times 2} - \frac{-11 \times 3}{2 \times 3}$$

$$F = \frac{41}{6}$$

$$G = \frac{11}{35} + \frac{-13}{28}$$

$$G = \frac{11 \times 4}{35 \times 4} + \frac{-13 \times 5}{28 \times 5}$$

$$G = \frac{-21}{140}$$

$$G = \frac{-3 \times 7}{20 \times 7}$$

$$G = \frac{-3}{20}$$

$$H = \frac{-8}{35} - \frac{-13}{14}$$

$$H = \frac{-8 \times 2}{35 \times 2} - \frac{-13 \times 5}{14 \times 5}$$

$$H = \frac{49}{70}$$

$$H = \frac{7 \times 7}{10 \times 7}$$

$$H = \frac{7}{10}$$

Corrigé de l'exercice 4

Effectuer les calculs suivants et donner le résultat sous la forme d'une fraction simplifiée :

$$A = 10 - \frac{11}{8}$$

$$A = \frac{10 \times 8}{1 \times 8} - \frac{11}{8}$$

$$A = \frac{69}{8}$$

$$B = 6 + \frac{12}{5}$$

$$B = \frac{6 \times 5}{1 \times 5} + \frac{12}{5}$$

$$B = \frac{42}{5}$$

$$C = \frac{10}{3} - \frac{14}{5}$$

$$C = \frac{10 \times 5}{3 \times 5} - \frac{14 \times 3}{5 \times 3}$$

$$C = \frac{8}{15}$$

$$D = \frac{13}{5} + \frac{7}{4}$$

$$D = \frac{13 \times 4}{5 \times 4} + \frac{7 \times 5}{4 \times 5}$$

$$D = \frac{87}{20}$$

$$E = \frac{15}{2} + \frac{-3}{5}$$

$$E = \frac{15 \times 5}{2 \times 5} + \frac{-3 \times 2}{5 \times 2}$$

$$E = \frac{69}{10}$$

$$F = \frac{-11}{4} - \frac{-11}{5}$$

$$F = \frac{-11 \times 5}{4 \times 5} - \frac{-11 \times 4}{5 \times 4}$$

$$F = \frac{-11}{20}$$

$$G = \frac{-13}{22} + \frac{14}{33}$$

$$G = \frac{-13 \times 3}{22 \times 3} + \frac{14 \times 2}{33 \times 2}$$

$$G = \frac{-11}{66}$$

$$G = \frac{-1 \times 11}{6 \times 11}$$

$$G = \frac{-1}{6}$$

$$H = \frac{2}{35} - \frac{-10}{21}$$

$$H = \frac{2 \times 3}{35 \times 3} - \frac{-10 \times 5}{21 \times 5}$$

$$H = \frac{56}{105}$$

$$H = \frac{8 \times 7}{15 \times 7}$$

$$H = \frac{8}{15}$$

Corrigé de l'exercice 5

Effectuer les calculs suivants et donner le résultat sous la forme d'une fraction simplifiée :

$$A = \frac{7}{4} + 14$$

$$A = \frac{7}{4} + \frac{14 \times 4}{1 \times 4}$$

$$A = \frac{63}{4}$$

$$B = \frac{13}{10} - \frac{1}{2}$$

$$B = \frac{13}{10} - \frac{1 \times 5}{2 \times 5}$$

$$B = \frac{8}{10}$$

$$B = \frac{4 \times 2}{5 \times 2}$$

$$B = \frac{4}{5}$$

$$C = \frac{3}{2} - \frac{6}{5}$$

$$C = \frac{3 \times 5}{2 \times 5} - \frac{6 \times 2}{5 \times 2}$$

$$C = \frac{3}{10}$$

$$D = \frac{11}{2} + \frac{11}{9}$$

$$D = \frac{11 \times 9}{2 \times 9} + \frac{11 \times 2}{9 \times 2}$$

$$D = \frac{121}{18}$$

$$E = \frac{2}{5} - \frac{-5}{3}$$

$$E = \frac{2 \times 3}{5 \times 3} - \frac{-5 \times 5}{3 \times 5}$$

$E = \frac{31}{15}$ $F = \frac{-3}{5} + \frac{5}{3}$ $F = \frac{-3 \times 3}{5 \times 3} + \frac{5 \times 5}{3 \times 5}$	$F = \frac{16}{15}$ $G = \frac{-13}{10} + \frac{-5}{4}$ $G = \frac{-13 \times 2}{10 \times 2} + \frac{-5 \times 5}{4 \times 5}$	$G = \frac{-51}{20}$ $H = \frac{-3}{10} - \frac{-1}{4}$ $H = \frac{-3 \times 2}{10 \times 2} - \frac{-1 \times 5}{4 \times 5}$	$H = \frac{-1}{20}$
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Corrigé de l'exercice 6

Effectuer les calculs suivants et donner le résultat sous la forme d'une fraction simplifiée :

$A = \frac{3}{7} + \frac{6}{35}$ $A = \frac{3 \times 5}{7 \times 5} + \frac{6}{35}$ $A = \frac{21}{35}$ $A = \frac{3 \times 7}{5 \times 7}$	$B = \frac{21}{20}$ $C = \frac{5}{4} + \frac{7}{5}$ $C = \frac{5 \times 5}{4 \times 5} + \frac{7 \times 4}{5 \times 4}$	$E = \frac{-14}{3} + \frac{-13}{2}$ $E = \frac{-14 \times 2}{3 \times 2} + \frac{-13 \times 3}{2 \times 3}$	$G = \frac{-65}{60}$ $G = \frac{-13 \times 5}{12 \times 5}$
$A = \frac{3}{5}$ $B = \frac{11}{8} - \frac{13}{40}$ $B = \frac{11 \times 5}{8 \times 5} - \frac{13}{40}$ $B = \frac{42}{40}$ $B = \frac{21 \times 2}{20 \times 2}$	$C = \frac{53}{20}$ $D = \frac{7}{4} - \frac{16}{3}$ $D = \frac{7 \times 3}{4 \times 3} - \frac{16 \times 4}{3 \times 4}$	$E = \frac{-67}{6}$ $F = \frac{3}{2} - \frac{-5}{3}$ $F = \frac{3 \times 3}{2 \times 3} - \frac{-5 \times 2}{3 \times 2}$	$G = \frac{-13}{12}$ $H = \frac{-7}{6} + \frac{2}{21}$ $H = \frac{-7 \times 7}{6 \times 7} + \frac{2 \times 2}{21 \times 2}$
$F = \frac{19}{6}$ $G = \frac{-13}{30} - \frac{13}{20}$ $G = \frac{-13 \times 2}{30 \times 2} - \frac{13 \times 3}{20 \times 3}$	$D = \frac{-43}{12}$	$H = \frac{-45}{42}$ $H = \frac{-15 \times 3}{14 \times 3}$	$H = \frac{-15}{14}$