Corrigé de l'exercice 1

Calculer en détaillant les étapes. Donner le résultat sous la forme d'une fraction la plus simple possible (ou d'un entier lorsque c'est possible).

▶1. $A = \frac{1}{4} + 1{,}5$

$A = \frac{1_{\times 5}}{4_{\times 5}} + \frac{15_{\times 2}}{10_{\times 2}}$

$A = \frac{5}{20} + \frac{30}{20}$

$A = \frac{35}{20}$

$A = \frac{7 \times \cancel{5}}{4 \times \cancel{5}}$

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

▶2. $B = \frac{6}{5} - \frac{5}{7}$

$B = \frac{6_{\times 7}}{5_{\times 7}} - \frac{5_{\times 5}}{7_{\times 5}}$

$B = \frac{42}{35} - \frac{25}{35}$

$B = \frac{17}{35}$

▶3. $C = \frac{7}{7} - \frac{9}{6}$

$C = \frac{7_{\times 6}}{7_{\times 6}} - \frac{9_{\times 7}}{6_{\times 7}}$

$C = \frac{42}{42} - \frac{63}{42}$

$C = \frac{-21}{42}$

$C = \frac{-1 \times \cancel{21}}{2 \times \cancel{21}}$

$C = \frac{-1}{2}$

▶4. $D = \frac{3}{6} + \frac{7}{6}$

$D = \frac{10}{6}$

$D = \frac{5 \times \cancel{2}}{3 \times \cancel{2}}$

$D = \frac{5}{3}$

▶5. $E = \frac{7}{18} + \frac{10}{3}$

$E = \frac{7}{18} + \frac{10_{\times 6}}{3_{\times 6}}$

$E = \frac{7}{18} + \frac{60}{18}$

$E = \frac{67}{18}$

▶6. $F = 9 - \frac{6}{6}$

$F = \frac{9_{\times 6}}{1_{\times 6}} - \frac{6}{6}$

$F = \frac{54}{6} - \frac{6}{6}$

$F = \frac{48}{6}$

$F = \frac{8 \times \cancel{6}}{1 \times \cancel{6}}$

$F = 8$

▶7. $G = 1 - \frac{8}{10}$

$G = \frac{1_{\times 10}}{1_{\times 10}} - \frac{8}{10}$

$G = \frac{10}{10} - \frac{8}{10}$

$G = \frac{2}{10}$

$G = \frac{1 \times \cancel{2}}{5 \times \cancel{2}}$

$G = \frac{1}{5}$

▶8. $H = \frac{10}{3} - \frac{3}{8}$

$H = \frac{10_{\times 8}}{3_{\times 8}} - \frac{3_{\times 3}}{8_{\times 3}}$

$H = \frac{80}{24} - \frac{9}{24}$

$H = \frac{71}{24}$

Corrigé de l'exercice 2

Calculer en détaillant les étapes. Donner le résultat sous la forme d'une fraction la plus simple possible (ou d'un entier lorsque c'est possible).

▶1. $A = 7{,}7 - \frac{9}{8}$

$A = \frac{77_{\times 4}}{10_{\times 4}} - \frac{9_{\times 5}}{8_{\times 5}}$

$A = \frac{308}{40} - \frac{45}{40}$

$A = \frac{263}{40}$

▶2. $B = 1 - \frac{1}{7}$

$B = \frac{1_{\times 7}}{1_{\times 7}} - \frac{1}{7}$

$B = \frac{7}{7} - \frac{1}{7}$

$B = \frac{6}{7}$

▶3. $C = \frac{2}{3} - \frac{7}{8}$

$C = \frac{2_{\times 8}}{3_{\times 8}} - \frac{7_{\times 3}}{8_{\times 3}}$

$C = \frac{16}{24} - \frac{21}{24}$

$C = \frac{-5}{24}$

▶4. $D = \frac{9}{6} + 6$

$D = \frac{9}{6} + \frac{6_{\times 6}}{1_{\times 6}}$

$D = \frac{9}{6} + \frac{36}{6}$

$D = \frac{45}{6}$

$D = \frac{15 \times \cancel{3}}{2 \times \cancel{3}}$

$D = \frac{15}{2}$

▶5. $E = \frac{4}{70} + \frac{9}{10}$

$E = \frac{4}{70} + \frac{9_{\times 7}}{10_{\times 7}}$

$E = \frac{4}{70} + \frac{63}{70}$

$E = \frac{67}{70}$

▶6. $F = \frac{7}{8} - \frac{3}{8}$

$F = \frac{4}{8}$

$F = \frac{1 \times \cancel{4}}{2 \times \cancel{4}}$

$F = \frac{1}{2}$

▶7. $G = \frac{7}{4} + \frac{7}{5}$

$G = \frac{7_{\times 5}}{4_{\times 5}} + \frac{7_{\times 4}}{5_{\times 4}}$

$G = \frac{35}{20} + \frac{28}{20}$

$G = \frac{63}{20}$

▶8. $H = \frac{8}{7} + \frac{7}{9}$

$H = \frac{8_{\times 9}}{7_{\times 9}} + \frac{7_{\times 7}}{9_{\times 7}}$

$H = \frac{72}{63} + \frac{49}{63}$

$H = \frac{121}{63}$

Corrigé de l'exercice 3

Calculer en détaillant les étapes. Donner le résultat sous la forme d'une fraction la plus simple possible (ou d'un entier lorsque c'est possible).

▶1. $A = 6 - \frac{6}{5}$

$A = \frac{6_{\times 5}}{1_{\times 5}} - \frac{6}{5}$

$A = \frac{30}{5} - \frac{6}{5}$

$A = \frac{24}{5}$

▶2. $B = \frac{7}{40} + \frac{10}{4}$

$B = \frac{7}{40} + \frac{10_{\times 10}}{4_{\times 10}}$

$B = \frac{7}{40} + \frac{100}{40}$

$B = \frac{107}{40}$

▶3. $C = \frac{6}{2} - \frac{7}{7}$

$C = \frac{6_{\times 7}}{2_{\times 7}} - \frac{7_{\times 2}}{7_{\times 2}}$

$C = \frac{42}{14} - \frac{14}{14}$

$C = \frac{28}{14}$

$C = \frac{2 \times \cancel{14}}{1 \times \cancel{14}}$

$C = 2$

▶4. $D = 1 - \frac{3}{9}$

$D = \frac{1_{\times 9}}{1_{\times 9}} - \frac{3}{9}$

$D = \frac{9}{9} - \frac{3}{9}$

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

$D = \frac{2 \times \cancel{3}}{\cancel{3} \times 3}$

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

▶5. $E = \frac{9}{2} - \frac{2}{3}$

$E = \frac{9_{\times 3}}{2_{\times 3}} - \frac{2_{\times 2}}{3_{\times 2}}$

$E = \frac{27}{6} - \frac{4}{6}$

$E = \frac{23}{6}$

▶6. $F = 5{,}4 - \frac{9}{9}$

$F = \frac{54_{\times 9}}{10_{\times 9}} - \frac{9_{\times 10}}{9_{\times 10}}$

$F = \frac{486}{90} - \frac{90}{90}$

$F = \frac{396}{90}$

$F = \frac{22 \times \cancel{18}}{5 \times \cancel{18}}$

$F = \frac{22}{5}$

▶7. $G = \frac{5}{9} - \frac{1}{2}$

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

$G = \frac{10}{18} - \frac{9}{18}$

$G = \frac{1}{18}$

▶8. $H = \frac{1}{8} + \frac{3}{8}$

$H = \frac{4}{8}$

$H = \frac{1 \times \cancel{4}}{2 \times \cancel{4}}$

$H = \frac{1}{2}$

Corrigé de l'exercice 4

Calculer en détaillant les étapes. Donner le résultat sous la forme d'une fraction la plus simple possible (ou d'un entier lorsque c'est possible).

▶1. $A = 6 - \frac{7}{8}$

$A = \frac{6_{\times 8}}{1_{\times 8}} - \frac{7}{8}$

$A = \frac{48}{8} - \frac{7}{8}$

$A = \frac{41}{8}$

▶2. $B = 3{,}5 - \frac{6}{2}$

$B = \frac{35}{10} - \frac{6_{\times 5}}{2_{\times 5}}$

$B = \frac{35}{10} - \frac{30}{10}$

$B = \frac{5}{10}$

$B = \frac{1 \times \cancel{5}}{2 \times \cancel{5}}$

$B = \frac{1}{2}$

▶3. $C = \frac{10}{10} + \frac{9}{10}$

$C = \frac{19}{10}$

▶4. $D = \frac{9}{8} - \frac{9}{7}$

$D = \frac{9_{\times 7}}{8_{\times 7}} - \frac{9_{\times 8}}{7_{\times 8}}$

$D = \frac{63}{56} - \frac{72}{56}$

$D = \frac{-9}{56}$

▶5. $E = \frac{7}{10} - \frac{8}{9}$

$E = \frac{7_{\times 9}}{10_{\times 9}} - \frac{8_{\times 10}}{9_{\times 10}}$

$E = \frac{63}{90} - \frac{80}{90}$

$E = \frac{-17}{90}$

▶6. $F = \frac{2}{20} + \frac{10}{5}$

$F = \frac{2}{20} + \frac{10_{\times 4}}{5_{\times 4}}$

$F = \frac{2}{20} + \frac{40}{20}$

$F = \frac{42}{20}$

$F = \frac{21 \times \cancel{2}}{10 \times \cancel{2}}$

$F = \frac{21}{10}$

▶7. $G = \frac{10}{7} - 1$

$G = \frac{10}{7} - \frac{1_{\times 7}}{1_{\times 7}}$

$G = \frac{10}{7} - \frac{7}{7}$

$G = \frac{3}{7}$

▶8. $H = \frac{8}{3} - \frac{6}{10}$

$H = \frac{8_{\times 10}}{3_{\times 10}} - \frac{6_{\times 3}}{10_{\times 3}}$

$H = \frac{80}{30} - \frac{18}{30}$

$H = \frac{62}{30}$

$H = \frac{31 \times \cancel{2}}{15 \times \cancel{2}}$

$H = \frac{31}{15}$

Corrigé de l'exercice 5

Calculer en détaillant les étapes. Donner le résultat sous la forme d'une fraction la plus simple possible (ou d'un entier lorsque c'est possible).

▶1. $A = \dfrac{10}{5} - \dfrac{10}{45}$

$A = \dfrac{10_{\times 9}}{5_{\times 9}} - \dfrac{10}{45}$

$A = \dfrac{90}{45} - \dfrac{10}{45}$

$A = \dfrac{80}{45}$

$A = \dfrac{16 \times \cancel{5}}{9 \times \cancel{5}}$

$A = \dfrac{16}{9}$

▶2. $B = 7 - \dfrac{7}{5}$

$B = \dfrac{7_{\times 5}}{1_{\times 5}} - \dfrac{7}{5}$

$B = \dfrac{35}{5} - \dfrac{7}{5}$

$B = \dfrac{28}{5}$

▶3. $C = \dfrac{7}{4} + \dfrac{4}{5}$

$C = \dfrac{7_{\times 5}}{4_{\times 5}} + \dfrac{4_{\times 4}}{5_{\times 4}}$

$C = \dfrac{35}{20} + \dfrac{16}{20}$

$C = \dfrac{51}{20}$

▶4. $D = 1 - \dfrac{3}{4}$

$D = \dfrac{1_{\times 4}}{1_{\times 4}} - \dfrac{3}{4}$

$D = \dfrac{4}{4} - \dfrac{3}{4}$

$D = \dfrac{1}{4}$

▶5. $E = \dfrac{5}{6} - \dfrac{1}{5}$

$E = \dfrac{5_{\times 5}}{6_{\times 5}} - \dfrac{1_{\times 6}}{5_{\times 6}}$

$E = \dfrac{25}{30} - \dfrac{6}{30}$

$E = \dfrac{19}{30}$

▶6. $F = \dfrac{2}{7} + 6{,}4$

$F = \dfrac{2_{\times 10}}{7_{\times 10}} + \dfrac{64_{\times 7}}{10_{\times 7}}$

$F = \dfrac{20}{70} + \dfrac{448}{70}$

$F = \dfrac{468}{70}$

$F = \dfrac{234 \times \cancel{2}}{35 \times \cancel{2}}$

$F = \dfrac{234}{35}$

▶7. $G = \dfrac{7}{5} - \dfrac{2}{5}$

$G = \dfrac{5}{5}$

$G = 1$

▶8. $H = \dfrac{4}{3} - \dfrac{7}{7}$

$H = \dfrac{4_{\times 7}}{3_{\times 7}} - \dfrac{7_{\times 3}}{7_{\times 3}}$

$H = \dfrac{28}{21} - \dfrac{21}{21}$

$H = \dfrac{7}{21}$

$H = \dfrac{1 \times \cancel{7}}{3 \times \cancel{7}}$

$H = \dfrac{1}{3}$

Corrigé de l'exercice 6

Calculer en détaillant les étapes. Donner le résultat sous la forme d'une fraction la plus simple possible (ou d'un entier lorsque c'est possible).

▶1. $A = \dfrac{10}{5} + \dfrac{10}{4}$

$A = \dfrac{10_{\times 4}}{5_{\times 4}} + \dfrac{10_{\times 5}}{4_{\times 5}}$

$A = \dfrac{40}{20} + \dfrac{50}{20}$

$A = \dfrac{90}{20}$

$A = \dfrac{9 \times \cancel{10}}{2 \times \cancel{10}}$

$A = \dfrac{9}{2}$

▶2. $B = \dfrac{3}{8} + \dfrac{2}{8}$

$B = \dfrac{5}{8}$

▶3. $C = 2{,}2 - \dfrac{4}{3}$

$C = \dfrac{22_{\times 3}}{10_{\times 3}} - \dfrac{4_{\times 10}}{3_{\times 10}}$

$C = \dfrac{66}{30} - \dfrac{40}{30}$

$C = \dfrac{26}{30}$

$C = \dfrac{13 \times \cancel{2}}{15 \times \cancel{2}}$

$C = \dfrac{13}{15}$

▶4. $D = \dfrac{9}{2} - \dfrac{10}{9}$

$D = \dfrac{9_{\times 9}}{2_{\times 9}} - \dfrac{10_{\times 2}}{9_{\times 2}}$

$D = \dfrac{81}{18} - \dfrac{20}{18}$

$D = \dfrac{61}{18}$

▶5. $E = \dfrac{7}{10} + 5$

$E = \dfrac{7}{10} + \dfrac{5_{\times 10}}{1_{\times 10}}$

$E = \dfrac{7}{10} + \dfrac{50}{10}$

$E = \dfrac{57}{10}$

▶6. $F = \dfrac{6}{6} - \dfrac{4}{8}$

$F = \dfrac{6_{\times 4}}{6_{\times 4}} - \dfrac{4_{\times 3}}{8_{\times 3}}$

$F = \dfrac{24}{24} - \dfrac{12}{24}$

$F = \dfrac{12}{24}$

$F = \dfrac{1 \times \cancel{12}}{2 \times \cancel{12}}$

$F = \dfrac{1}{2}$

▶7. $G = \dfrac{1}{36} + \dfrac{3}{4}$

$G = \dfrac{1}{36} + \dfrac{3_{\times 9}}{4_{\times 9}}$

$G = \dfrac{1}{36} + \dfrac{27}{36}$

$G = \dfrac{28}{36}$

$G = \dfrac{7 \times \cancel{4}}{9 \times \cancel{4}}$

$G = \dfrac{7}{9}$

▶8. $H = \dfrac{9}{8} - 1$

$H = \dfrac{9}{8} - \dfrac{1_{\times 8}}{1_{\times 8}}$

$H = \dfrac{9}{8} - \dfrac{8}{8}$

$H = \dfrac{1}{8}$