

1 Complète les calculs suivants.

a. $\frac{5}{9} + \frac{3}{9} = \frac{5 + 3}{9} = \frac{8}{9}$

b. $\frac{11}{13} + \frac{7}{13} = \frac{11 + 7}{13} = \frac{18}{13}$

c. $\frac{3}{7} - \frac{1}{7} = \frac{3 - 1}{7} = \frac{2}{7}$

d. $\frac{13}{21} - \frac{8}{21} = \frac{13 - 8}{21} = \frac{5}{21}$

e. $\frac{3}{14} + \frac{1}{14} + \frac{5}{14} = \frac{3 + 1 + 5}{14} = \frac{9}{14}$

f. $\frac{22}{47} + \frac{12}{47} + \frac{32}{47} = \frac{22 + 12 + 32}{47} = \frac{66}{47}$

2 Calcule mentalement.

a. $\frac{4}{9} + \frac{3}{9} = \frac{7}{9}$

e. $\frac{13}{17} - \frac{2}{17} = \frac{11}{17}$

b. $\frac{101}{4} + \frac{26}{4} = \frac{127}{4}$

f. $\frac{12}{12} - \frac{12}{12} = 0$

c. $\frac{43}{78} + \frac{28}{78} = \frac{71}{78}$

g. $\frac{91}{121} - \frac{90}{121} = \frac{1}{121}$

d. $\frac{15}{7} + \frac{1}{7} = \frac{16}{7}$

h. $\frac{25}{12} - \frac{13}{12} = \frac{12}{12} = 1$

3 Calcule puis simplifie, si c'est possible !

a. $\frac{1}{6} + \frac{3}{6} = \frac{4}{6} = \frac{2 \times 2}{2 \times 3} = \frac{2}{3}$

b. $\frac{25}{33} + \frac{19}{33} = \frac{44}{33} = \frac{4}{3}$

c. $\frac{17}{18} + \frac{19}{18} = \frac{36}{18} = \frac{18 \times 2}{18 \times 1} = \frac{2}{1} = 2$

d. $\frac{16}{25} + \frac{14}{25} = \frac{30}{25} = \frac{5 \times 6}{5 \times 5} = \frac{6}{5}$

4 Calcule puis simplifie, si c'est possible !

a. $\frac{31}{14} - \frac{5}{14} = \frac{26}{14} = \frac{2 \times 13}{2 \times 7} = \frac{13}{7}$

b. $\frac{19}{20} - \frac{3}{20} = \frac{16}{20} = \frac{4 \times 4}{4 \times 5} = \frac{4}{5}$

c. $\frac{47}{72} - \frac{35}{72} = \frac{12}{72} = \frac{12 \times 1}{12 \times 6} = \frac{1}{6}$

d. $\frac{15}{29} - \frac{8}{29} = \frac{7}{29}$

5 Calcule.

a. $\frac{7}{27} + \frac{4}{27} - \frac{1}{27} = \frac{10}{27}$

b. $\frac{17}{28} - \frac{7}{28} - \frac{5}{28} = \frac{5}{28}$

c. $\frac{13}{19} - \frac{5}{19} + \frac{6}{19} = \frac{14}{19}$

d. $\frac{25}{87} - \frac{15}{87} + \frac{35}{87} = \frac{45}{87}$

6 Calcule.

a. $\frac{3}{10} + \frac{4}{10} = \frac{7}{10}$

b. $\frac{84}{10} - \frac{65}{10} = \frac{19}{10}$

c. $\frac{154}{100} + \frac{623}{100} = \frac{777}{100}$

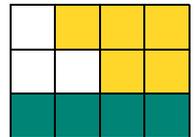
d. $\frac{572}{100} - \frac{219}{100} = \frac{353}{100}$

e. $\frac{7}{10} + \frac{9}{100} = \frac{70}{100} + \frac{9}{100} = \frac{79}{100}$

f. $\frac{1}{10} - \frac{1}{1000} = \frac{100}{1000} - \frac{1}{1000} = \frac{99}{1000}$



7 a. L'égalité $\frac{1}{3} + \frac{5}{12} = \frac{9}{12}$ est illustrée par la figure ci-contre. Explique pourquoi.



partie verte + partie jaune = partie colorée

soit $\frac{1}{3} + \frac{5}{12} = \frac{9}{12}$

b. En t'inspirant de la question **a**, écris une égalité illustrant chacune des figures suivantes.

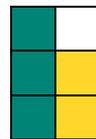


Figure 1

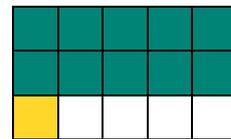


Figure 2

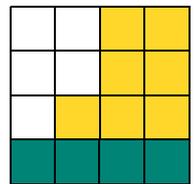


Figure 3

Figure 1 : $\frac{1}{2} + \frac{2}{6} = \frac{5}{6}$

Figure 2 : $\frac{2}{3} + \frac{1}{15} = \frac{11}{15}$

Figure 3 : $\frac{1}{4} + \frac{7}{16} = \frac{11}{16}$