

## Opérations Mixtes (A)

## Complétez les exercices suivants

$$\begin{array}{r}
 + \quad 4 \\
 + \quad 9 \\
 \hline
 + \quad 1 \\
 + 11 \\
 \hline
 + \quad 5 \\
 + \quad 3 \\
 \hline
 + \quad 4 \\
 + \quad 9 \\
 \hline
 + \quad 2 \\
 + \quad 5 \\
 \hline
 + \quad 10 \\
 + \quad 8 \\
 \hline
 - \quad 10 \\
 - \quad 5 \\
 \hline
 + \quad 7 \\
 + \quad 3 \\
 \hline
 + \quad 3 \\
 + \quad 2 \\
 \hline
 + \quad 5 \\
 + 12 \\
 \hline
 \end{array}$$

$$-\frac{10}{9} + \frac{12}{11} - \frac{11}{3} - \frac{16}{8} + \frac{3}{12} + \frac{6}{7} - \frac{17}{9} + \frac{9}{1} - \frac{20}{12} + \frac{12}{9}$$

$$-\frac{12}{9} - \frac{16}{5} - \frac{18}{10} - \frac{16}{10} + \frac{10}{12} + \frac{12}{7} - \frac{9}{8} - \frac{15}{6} - \frac{18}{6} + \frac{7}{8}$$

$$-\frac{11}{6} + \frac{3}{9} - \frac{4}{3} - \frac{15}{10} + \frac{8}{12} + \frac{11}{7} - \frac{5}{1} + \frac{1}{6} - \frac{10}{7} + \frac{9}{11}$$

$$-\frac{16}{5} + \frac{1}{2} + \frac{4}{6} - \frac{6}{1} + \frac{12}{8} + \frac{7}{3} + \frac{8}{12} - \frac{17}{10} - \frac{12}{1} - \frac{10}{2}$$

$$-\frac{16}{6} + \frac{5}{7} - \frac{11}{10} + \frac{10}{3} - \frac{11}{4} + \frac{1}{1} - \frac{13}{2} + \frac{2}{9} - \frac{13}{9} - \frac{7}{5}$$

$$+ \begin{array}{r} 10 \\ 8 \end{array} - \begin{array}{r} 19 \\ 9 \end{array} - \begin{array}{r} 20 \\ 11 \end{array} - \begin{array}{r} 15 \\ 4 \end{array} - \begin{array}{r} 16 \\ 8 \end{array} - \begin{array}{r} 17 \\ 12 \end{array} + \begin{array}{r} 8 \\ 9 \end{array} + \begin{array}{r} 8 \\ 5 \end{array} - \begin{array}{r} 8 \\ 5 \end{array} - \begin{array}{r} 19 \\ 7 \end{array}$$

$$-8 + 3 + 12 - 14 - 18 + 6 + 8 + 4 + 9 + 8 + 11$$

$$-2 + 1 + 8 - 11 - 10 + 6 + 12 + 9 + 8 + 11$$

$$-\frac{15}{5} - \frac{13}{11} + \frac{1}{10} + \frac{1}{7} - \frac{4}{2} + \frac{3}{6} + \frac{5}{3} - \frac{16}{7} - \frac{14}{6} + \frac{7}{10}$$

$$-\frac{5}{1} - \frac{20}{12} - \frac{22}{12} + \frac{4}{1} - \frac{21}{11} - \frac{15}{11} + \frac{2}{9} + \frac{1}{2} - \frac{11}{7} + \frac{7}{12}$$

# Opérations Mixtes Solutions (A)

Complétez les exercices suivants

$$\begin{array}{r}
 + & 4 & & 1 & & 5 & & 4 & & 2 & & 10 & & 10 & & 7 & & 3 & & 5 \\
 + & 9 & & + 11 & & + 3 & & + 9 & & + 5 & & + 8 & & - 5 & & + 3 & & + 2 & & + 12 \\
 \hline
 13 & & 12 & & 8 & & 13 & & 7 & & 18 & & 5 & & 10 & & 5 & & 17
 \end{array}$$
  

$$\begin{array}{r}
 - & 10 & & 12 & & 11 & & 16 & & 3 & & 6 & & 17 & & 9 & & 20 & & 12 \\
 - & 9 & & + 11 & & - 3 & & - 8 & & + 12 & & + 7 & & - 9 & & + 1 & & - 12 & & + 9 \\
 \hline
 1 & & 23 & & 8 & & 8 & & 15 & & 13 & & 8 & & 10 & & 8 & & 21
 \end{array}$$
  

$$\begin{array}{r}
 - & 12 & & 16 & & 18 & & 16 & & 10 & & 12 & & 9 & & 15 & & 18 & & 7 \\
 - & 9 & & - 5 & & - 10 & & - 10 & & + 12 & & + 7 & & - 8 & & - 6 & & - 6 & & + 8 \\
 \hline
 3 & & 11 & & 8 & & 6 & & 22 & & 19 & & 1 & & 9 & & 12 & & 15
 \end{array}$$
  

$$\begin{array}{r}
 - & 11 & & 3 & & 4 & & 15 & & 8 & & 11 & & 5 & & 1 & & 10 & & 9 \\
 - & 6 & & + 9 & & - 3 & & - 10 & & + 12 & & + 7 & & - 1 & & + 6 & & - 7 & & + 11 \\
 \hline
 5 & & 12 & & 1 & & 5 & & 20 & & 18 & & 4 & & 7 & & 3 & & 20
 \end{array}$$
  

$$\begin{array}{r}
 - & 16 & & 1 & & 4 & & 6 & & 12 & & 7 & & 8 & & 17 & & 12 & & 10 \\
 - & 5 & & + 2 & & + 6 & & - 1 & & + 8 & & + 3 & & + 12 & & - 10 & & - 1 & & - 2 \\
 \hline
 11 & & 3 & & 10 & & 5 & & 20 & & 10 & & 20 & & 7 & & 11 & & 8
 \end{array}$$
  

$$\begin{array}{r}
 - & 16 & & 5 & & 11 & & 10 & & 11 & & 1 & & 13 & & 2 & & 13 & & 7 \\
 - & 6 & & + 7 & & - 10 & & + 3 & & - 4 & & + 1 & & - 2 & & + 9 & & - 9 & & - 5 \\
 \hline
 10 & & 12 & & 1 & & 13 & & 7 & & 2 & & 11 & & 11 & & 4 & & 2
 \end{array}$$
  

$$\begin{array}{r}
 + & 10 & & 19 & & 20 & & 15 & & 16 & & 17 & & 8 & & 8 & & 8 & & 19 \\
 + & 8 & & - 9 & & - 11 & & - 4 & & - 8 & & - 12 & & + 9 & & + 5 & & - 5 & & - 7 \\
 \hline
 18 & & 10 & & 9 & & 11 & & 8 & & 5 & & 17 & & 13 & & 3 & & 12
 \end{array}$$
  

$$\begin{array}{r}
 - & 8 & & 3 & & 12 & & 14 & & 18 & & 6 & & 8 & & 4 & & 9 & & 11 \\
 - & 2 & & + 1 & & + 8 & & - 11 & & - 10 & & + 6 & & + 12 & & + 9 & & + 8 & & + 11 \\
 \hline
 6 & & 4 & & 20 & & 3 & & 8 & & 12 & & 20 & & 13 & & 17 & & 22
 \end{array}$$
  

$$\begin{array}{r}
 - & 15 & & 13 & & 1 & & 1 & & 4 & & 3 & & 5 & & 16 & & 14 & & 7 \\
 - & 5 & & - 11 & & + 10 & & + 7 & & - 2 & & + 6 & & + 3 & & - 7 & & - 6 & & + 10 \\
 \hline
 10 & & 2 & & 11 & & 8 & & 2 & & 9 & & 8 & & 9 & & 8 & & 17
 \end{array}$$
  

$$\begin{array}{r}
 - & 5 & & 20 & & 22 & & 4 & & 21 & & 15 & & 2 & & 1 & & 11 & & 7 \\
 - & 1 & & - 12 & & - 12 & & + 1 & & - 11 & & - 11 & & 4 & & 11 & & 7 & & + 12 \\
 \hline
 4 & & 8 & & 10 & & 5 & & 10 & & 4 & & 11 & & 3 & & 4 & & 19
 \end{array}$$

# Opérations Mixtes (B)

Complétez les exercices suivants

$$\begin{array}{r} + \quad 2 \\ \underline{+} \quad 7 \\ - \quad 9 \end{array} \quad \begin{array}{r} - \quad 16 \\ \underline{-} \quad 9 \\ + \quad 4 \end{array} \quad \begin{array}{r} + \quad 6 \\ \underline{+} \quad 10 \\ + \quad 4 \end{array} \quad \begin{array}{r} + \quad 4 \\ \underline{+} \quad 1 \end{array} \quad \begin{array}{r} - \quad 16 \\ \underline{-} \quad 7 \\ - \quad 8 \end{array} \quad \begin{array}{r} - \quad 14 \\ \underline{-} \quad 8 \\ - \quad 7 \end{array} \quad \begin{array}{r} - \quad 19 \\ \underline{-} \quad 7 \\ - \quad 2 \end{array}$$

$$\begin{array}{r} + \quad 8 \\ \underline{+} \quad 7 \\ + \quad 11 \end{array} \quad \begin{array}{r} + \quad 3 \\ \underline{+} \quad 1 \\ - \quad 14 \\ \underline{-} \quad 7 \end{array} \quad \begin{array}{r} + \quad 10 \\ \underline{+} \quad 9 \\ + \quad 3 \end{array} \quad \begin{array}{r} + \quad 3 \\ \underline{+} \quad 4 \\ + \quad 5 \end{array} \quad \begin{array}{r} + \quad 8 \\ \underline{+} \quad 5 \\ + \quad 9 \end{array} \quad \begin{array}{r} + \quad 9 \\ \underline{+} \quad 8 \\ + \quad 3 \end{array}$$

$$\begin{array}{r} + \quad 6 \\ \underline{+} \quad 2 \\ - \quad 17 \\ \underline{-} \quad 12 \end{array} \quad \begin{array}{r} + \quad 2 \\ \underline{+} \quad 7 \\ + \quad 7 \end{array} \quad \begin{array}{r} - \quad 23 \\ \underline{-} \quad 12 \end{array} \quad \begin{array}{r} + \quad 7 \\ \underline{+} \quad 6 \\ - \quad 21 \\ \underline{-} \quad 12 \end{array} \quad \begin{array}{r} - \quad 12 \\ \underline{-} \quad 3 \\ + \quad 2 \end{array} \quad \begin{array}{r} - \quad 21 \\ \underline{-} \quad 9 \\ - \quad 4 \end{array}$$

$$\begin{array}{r} - \quad 4 \\ \underline{-} \quad 2 \\ + \quad 12 \end{array} \quad \begin{array}{r} + \quad 3 \\ \underline{+} \quad 10 \\ - \quad 11 \\ \underline{-} \quad 6 \end{array} \quad \begin{array}{r} - \quad 3 \\ \underline{-} \quad 2 \\ - \quad 9 \\ \underline{-} \quad 8 \end{array} \quad \begin{array}{r} + \quad 9 \\ \underline{+} \quad 5 \\ - \quad 5 \\ \underline{-} \quad 1 \end{array} \quad \begin{array}{r} + \quad 7 \\ \underline{+} \quad 5 \\ + \quad 10 \end{array}$$

$$\begin{array}{r} - \quad 15 \\ \underline{-} \quad 4 \\ + \quad 7 \end{array} \quad \begin{array}{r} + \quad 12 \\ \underline{+} \quad 10 \\ - \quad 6 \\ \underline{-} \quad 11 \end{array} \quad \begin{array}{r} + \quad 6 \\ \underline{+} \quad 3 \\ - \quad 6 \\ \underline{-} \quad 4 \end{array} \quad \begin{array}{r} - \quad 10 \\ \underline{-} \quad 4 \\ + \quad 5 \\ \underline{+} \quad 6 \end{array} \quad \begin{array}{r} - \quad 3 \\ \underline{-} \quad 1 \\ + \quad 8 \\ \underline{+} \quad 6 \end{array} \quad \begin{array}{r} - \quad 8 \\ \underline{-} \quad 2 \\ - \quad 13 \\ \underline{-} \quad 2 \end{array}$$

$$\begin{array}{r} - \quad 14 \\ \underline{-} \quad 4 \\ + \quad 6 \end{array} \quad \begin{array}{r} + \quad 6 \\ \underline{+} \quad 3 \\ - \quad 9 \\ \underline{-} \quad 7 \end{array} \quad \begin{array}{r} + \quad 8 \\ \underline{+} \quad 12 \\ - \quad 14 \\ \underline{-} \quad 8 \end{array} \quad \begin{array}{r} - \quad 19 \\ \underline{-} \quad 10 \\ - \quad 3 \\ \underline{-} \quad 2 \end{array} \quad \begin{array}{r} - \quad 3 \\ \underline{-} \quad 2 \\ - \quad 14 \\ \underline{-} \quad 8 \end{array} \quad \begin{array}{r} - \quad 11 \\ \underline{-} \quad 9 \end{array}$$

$$\begin{array}{r} + \quad 8 \\ \underline{+} \quad 8 \\ + \quad 1 \end{array} \quad \begin{array}{r} + \quad 6 \\ \underline{+} \quad 7 \\ + \quad 12 \\ \underline{+} \quad 3 \end{array} \quad \begin{array}{r} - \quad 3 \\ \underline{-} \quad 2 \\ - \quad 13 \\ \underline{-} \quad 5 \end{array} \quad \begin{array}{r} - \quad 15 \\ \underline{-} \quad 9 \\ + \quad 2 \\ \underline{+} \quad 2 \end{array} \quad \begin{array}{r} - \quad 16 \\ \underline{-} \quad 9 \\ - \quad 11 \\ \underline{-} \quad 4 \end{array}$$

$$\begin{array}{r} + \quad 1 \\ \underline{+} \quad 3 \\ - \quad 15 \end{array} \quad \begin{array}{r} - \quad 5 \\ \underline{-} \quad 4 \\ - \quad 13 \\ \underline{-} \quad 2 \end{array} \quad \begin{array}{r} - \quad 12 \\ \underline{-} \quad 10 \\ + \quad 8 \\ \underline{+} \quad 8 \end{array} \quad \begin{array}{r} + \quad 11 \\ \underline{+} \quad 10 \\ - \quad 14 \\ \underline{-} \quad 10 \end{array} \quad \begin{array}{r} - \quad 18 \\ \underline{-} \quad 6 \\ + \quad 3 \\ \underline{+} \quad 10 \end{array}$$

$$\begin{array}{r} + \quad 11 \\ \underline{+} \quad 10 \\ + \quad 2 \end{array} \quad \begin{array}{r} + \quad 7 \\ \underline{+} \quad 10 \\ + \quad 1 \end{array} \quad \begin{array}{r} + \quad 1 \\ \underline{+} \quad 3 \\ + \quad 2 \\ \underline{+} \quad 3 \end{array} \quad \begin{array}{r} + \quad 2 \\ \underline{+} \quad 2 \\ - \quad 19 \\ \underline{-} \quad 8 \end{array} \quad \begin{array}{r} + \quad 4 \\ \underline{+} \quad 12 \\ - \quad 9 \\ \underline{-} \quad 2 \end{array} \quad \begin{array}{r} - \quad 9 \\ \underline{-} \quad 7 \end{array}$$

$$\begin{array}{r} - \quad 17 \\ \underline{-} \quad 9 \\ + \quad 6 \end{array} \quad \begin{array}{r} - \quad 11 \\ \underline{-} \quad 6 \\ - \quad 8 \\ \underline{-} \quad 3 \end{array} \quad \begin{array}{r} + \quad 8 \\ \underline{+} \quad 6 \\ + \quad 6 \\ \underline{+} \quad 8 \end{array} \quad \begin{array}{r} + \quad 6 \\ \underline{+} \quad 8 \\ + \quad 3 \\ \underline{+} \quad 3 \end{array} \quad \begin{array}{r} + \quad 1 \\ \underline{+} \quad 4 \\ - \quad 10 \\ \underline{-} \quad 4 \end{array} \quad \begin{array}{r} - \quad 8 \\ \underline{-} \quad 1 \end{array}$$

# Opérations Mixtes Solutions (B)

Complétez les exercices suivants

$$\begin{array}{r}
 + \quad 2 & - \quad 16 & + \quad 4 & + \quad 6 & + \quad 4 & + \quad 11 & - \quad 16 & - \quad 14 & - \quad 19 & - \quad 8 \\
 \hline
 + \quad 7 & - \quad 9 & + \quad 9 & + \quad 10 & + \quad 4 & + \quad 1 & - \quad 7 & - \quad 8 & - \quad 7 & - \quad 2 \\
 \hline
 \quad 9 & \quad 7 & \quad 13 & \quad 16 & \quad 8 & \quad 12 & \quad 9 & \quad 6 & \quad 12 & \quad 6
 \end{array}$$
  

$$\begin{array}{r}
 + \quad 8 & + \quad 11 & + \quad 3 & - \quad 14 & + \quad 10 & + \quad 3 & + \quad 3 & + \quad 8 & + \quad 9 & + \quad 3 \\
 \hline
 + \quad 7 & + \quad 12 & + \quad 1 & - \quad 7 & + \quad 9 & + \quad 4 & + \quad 5 & + \quad 5 & + \quad 8 & + \quad 3 \\
 \hline
 \quad 15 & \quad 23 & \quad 4 & \quad 7 & \quad 19 & \quad 7 & \quad 8 & \quad 13 & \quad 17 & \quad 6
 \end{array}$$
  

$$\begin{array}{r}
 + \quad 6 & - \quad 17 & + \quad 2 & - \quad 23 & + \quad 7 & - \quad 21 & - \quad 12 & + \quad 2 & - \quad 21 & - \quad 15 \\
 \hline
 + \quad 2 & - \quad 12 & + \quad 7 & - \quad 12 & + \quad 6 & - \quad 12 & - \quad 3 & + \quad 9 & - \quad 9 & - \quad 4 \\
 \hline
 \quad 8 & \quad 5 & \quad 9 & \quad 11 & \quad 13 & \quad 9 & \quad 9 & \quad 11 & \quad 12 & \quad 11
 \end{array}$$
  

$$\begin{array}{r}
 - \quad 4 & + \quad 12 & + \quad 3 & - \quad 11 & - \quad 2 & - \quad 8 & + \quad 9 & - \quad 5 & + \quad 7 & + \quad 2 \\
 \hline
 - \quad 2 & + \quad 7 & + \quad 10 & - \quad 6 & - \quad 2 & - \quad 1 & + \quad 5 & - \quad 1 & + \quad 5 & + \quad 10 \\
 \hline
 \quad 2 & \quad 19 & \quad 13 & \quad 5 & \quad 1 & \quad 1 & \quad 14 & \quad 4 & \quad 12 & \quad 12
 \end{array}$$
  

$$\begin{array}{r}
 - \quad 15 & + \quad 7 & + \quad 12 & - \quad 6 & + \quad 6 & - \quad 4 & + \quad 5 & - \quad 3 & + \quad 8 & - \quad 13 \\
 \hline
 - \quad 4 & + \quad 2 & + \quad 10 & + \quad 11 & + \quad 3 & - \quad 4 & + \quad 6 & - \quad 1 & + \quad 6 & - \quad 2 \\
 \hline
 \quad 11 & \quad 9 & \quad 22 & \quad 17 & \quad 9 & \quad 6 & \quad 11 & \quad 2 & \quad 14 & \quad 11
 \end{array}$$
  

$$\begin{array}{r}
 - \quad 14 & + \quad 6 & + \quad 6 & - \quad 9 & + \quad 8 & - \quad 8 & - \quad 14 & - \quad 3 & - \quad 14 & - \quad 11 \\
 \hline
 - \quad 4 & + \quad 8 & + \quad 3 & - \quad 7 & + \quad 12 & - \quad 8 & - \quad 10 & - \quad 2 & - \quad 8 & - \quad 9 \\
 \hline
 \quad 10 & \quad 14 & \quad 9 & \quad 2 & \quad 20 & \quad 6 & \quad 9 & \quad 1 & \quad 6 & \quad 2
 \end{array}$$
  

$$\begin{array}{r}
 + \quad 8 & + \quad 1 & + \quad 6 & + \quad 12 & + \quad 3 & - \quad 5 & - \quad 13 & + \quad 2 & + \quad 16 & + \quad 11 \\
 \hline
 + \quad 8 & + \quad 2 & + \quad 7 & + \quad 3 & - \quad 2 & - \quad 1 & - \quad 8 & - \quad 9 & - \quad 7 & + \quad 4 \\
 \hline
 \quad 16 & \quad 3 & \quad 13 & \quad 15 & \quad 1 & \quad 8 & \quad 6 & \quad 4 & \quad 7 & \quad 15
 \end{array}$$
  

$$\begin{array}{r}
 + \quad 1 & - \quad 15 & - \quad 5 & - \quad 13 & - \quad 12 & + \quad 8 & + \quad 11 & - \quad 14 & - \quad 18 & + \quad 3 \\
 \hline
 + \quad 3 & - \quad 6 & - \quad 4 & - \quad 2 & - \quad 10 & + \quad 8 & + \quad 10 & - \quad 10 & - \quad 6 & + \quad 10 \\
 \hline
 \quad 4 & \quad 9 & \quad 1 & \quad 11 & \quad 2 & \quad 16 & \quad 21 & \quad 4 & \quad 12 & \quad 13
 \end{array}$$
  

$$\begin{array}{r}
 + \quad 11 & + \quad 11 & + \quad 7 & + \quad 1 & + \quad 2 & + \quad 2 & - \quad 19 & + \quad 4 & + \quad 9 & + \quad 17 \\
 \hline
 + \quad 10 & + \quad 2 & + \quad 10 & + \quad 3 & + \quad 3 & + \quad 2 & - \quad 8 & + \quad 12 & - \quad 2 & + \quad 7 \\
 \hline
 \quad 21 & \quad 13 & \quad 17 & \quad 4 & \quad 5 & \quad 4 & \quad 11 & \quad 16 & \quad 7 & \quad 10
 \end{array}$$
  

$$\begin{array}{r}
 - \quad 17 & + \quad 6 & - \quad 11 & - \quad 8 & + \quad 8 & + \quad 6 & + \quad 1 & + \quad 1 & - \quad 10 & + \quad 8 \\
 \hline
 - \quad 9 & + \quad 5 & - \quad 6 & - \quad 3 & + \quad 6 & + \quad 8 & + \quad 3 & + \quad 4 & - \quad 4 & + \quad 1 \\
 \hline
 \quad 8 & \quad 11 & \quad 5 & \quad 5 & \quad 14 & \quad 14 & \quad 4 & \quad 5 & \quad 6 & \quad 9
 \end{array}$$

## Opérations Mixtes (C)

## Complétez les exercices suivants

$$\begin{array}{r}
 + 2 & + 10 & + 11 & + 10 & + 6 & - 16 & - 20 & - 18 & - 14 & + 5 \\
 + 9 & + 4 & + 3 & + 6 & + 6 & - 7 & - 11 & - 10 & - 12 & + 5 \\
 \hline
\end{array}$$

$$\begin{array}{r}
 1 & 9 & 10 & 9 & 6 & 6 & 12 & 16 & 5 & 9 \\
 + 12 & - 8 & + 2 & - 3 & - 5 & - 2 & + 1 & - 12 & + 6 & + 2 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 -21 \\
 -10
 \end{array}
 \quad
 \begin{array}{r}
 +9 \\
 +9
 \end{array}
 \quad
 \begin{array}{r}
 +1 \\
 +1
 \end{array}
 \quad
 \begin{array}{r}
 -13 \\
 -1
 \end{array}
 \quad
 \begin{array}{r}
 -11 \\
 -10
 \end{array}
 \quad
 \begin{array}{r}
 -21 \\
 -9
 \end{array}
 \quad
 \begin{array}{r}
 -16 \\
 -6
 \end{array}
 \quad
 \begin{array}{r}
 -11 \\
 -10
 \end{array}
 \quad
 \begin{array}{r}
 +9 \\
 +10
 \end{array}
 \quad
 \begin{array}{r}
 -7 \\
 -6
 \end{array}$$

$$\begin{array}{r}
 + \quad 1 \\
 + \quad 4 \\
 \hline
 + \quad 1 \\
 - \quad 4 \\
 \hline
 - \quad 3 \\
 - \quad 8 \\
 \hline
 - \quad 16 \\
 - \quad 2 \\
 \hline
 + \quad 1 \\
 + \quad 9 \\
 \hline
 + \quad 10 \\
 - \quad 4 \\
 \hline
 - \quad 9 \\
 - \quad 4 \\
 \hline
 - \quad 11 \\
 + \quad 2 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 -18 \\
 -11 \\
 \hline
 +10 \\
 +7 \\
 \hline
 +2 \\
 +8 \\
 \hline
 -7 \\
 -2 \\
 \hline
 +9 \\
 +11 \\
 \hline
 +8 \\
 +11 \\
 \hline
 +12 \\
 +4 \\
 \hline
 -2 \\
 -1 \\
 \hline
 -17 \\
 -9 \\
 \hline
 +1 \\
 +5
 \end{array}$$

$$\begin{array}{r}
 + \frac{9}{8} \\
 + \frac{10}{4} \\
 + \frac{3}{12} \\
 + \frac{11}{4} \\
 - \frac{6}{2} \\
 - \frac{13}{2} \\
 + \frac{4}{3} \\
 - \frac{16}{9} \\
 - \frac{23}{11} \\
 + \frac{6}{1}
 \end{array}$$

$$\begin{array}{r}
 -\frac{9}{3} + \frac{5}{5} - \frac{9}{5} + \frac{9}{4} + \frac{4}{9} - \frac{18}{8} - \frac{20}{9} - \frac{14}{5} + \frac{12}{4} - \frac{21}{11}
 \end{array}$$

$$\begin{array}{r}
 -16 \\
 -10 \\
 \hline
 -15 \\
 -12 \\
 \hline
 -20 \\
 -12 \\
 +10 \\
 \hline
 5 \\
 -10 \\
 \hline
 11 \\
 -6 \\
 \hline
 13 \\
 -11 \\
 \hline
 14 \\
 -1 \\
 \hline
 11 \\
 -1 \\
 \hline
 8 \\
 -1 \\
 \hline
 3 \\
 +6 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 + 7 \\
 + 10 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 + 9 \\
 + 9 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 - 21 \\
 - 9 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 - 16 \\
 - 9 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 + 12 \\
 + 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 - 5 \\
 - 3 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 + 9 \\
 + 6 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 + 12 \\
 + 7 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 + 8 \\
 + 8 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 + 5 \\
 + 8 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 + \frac{8}{8} \\
 - \frac{14}{12} \\
 - \frac{16}{4} \\
 - \frac{5}{2} \\
 + \frac{6}{6} \\
 + \frac{7}{7} \\
 + \frac{5}{1} \\
 + \frac{3}{2} \\
 - \frac{11}{9} \\
 - \frac{17}{9}
 \end{array}$$

# Opérations Mixtes Solutions (C)

Complétez les exercices suivants

$$\begin{array}{r}
 + 2 & + 10 & + 11 & + 10 & + 6 & - 16 & - 20 & - 18 & - 14 & + 5 \\
 + 9 & + 4 & + 3 & + 6 & + 6 & - 7 & - 11 & - 10 & - 12 & + 5 \\
 \hline
 11 & 14 & 14 & 16 & 12 & 9 & 9 & 8 & 2 & 10
 \end{array}$$
  

$$\begin{array}{r}
 + 1 & - 9 & + 10 & - 9 & - 6 & - 2 & + 12 & - 16 & + 5 & + 9 \\
 + 12 & - 8 & + 2 & - 3 & - 5 & - 2 & + 1 & - 12 & + 6 & + 2 \\
 \hline
 13 & 1 & 12 & 6 & 1 & 4 & 13 & 4 & 11 & 11
 \end{array}$$
  

$$\begin{array}{r}
 - 21 & + 9 & + 1 & - 13 & - 11 & - 21 & - 16 & - 11 & + 9 & - 7 \\
 - 10 & + 9 & + 1 & - 1 & - 10 & - 9 & - 6 & - 10 & + 10 & - 6 \\
 \hline
 11 & 18 & 2 & 12 & 1 & 12 & 10 & 1 & 19 & 1
 \end{array}$$
  

$$\begin{array}{r}
 + 1 & + 1 & - 5 & - 16 & - 4 & + 11 & + 10 & - 9 & + 11 & + 12 \\
 + 4 & + 4 & - 3 & - 8 & - 2 & + 1 & + 9 & - 4 & - 4 & + 2 \\
 \hline
 5 & 5 & 2 & 8 & 2 & 12 & 19 & 5 & 7 & 14
 \end{array}$$
  

$$\begin{array}{r}
 - 18 & + 10 & + 2 & - 7 & 9 & 8 & 12 & 2 & 17 & 1 \\
 - 11 & + 7 & + 8 & - 2 & + 11 & + 11 & + 4 & - 1 & - 9 & + 5 \\
 \hline
 7 & 17 & 10 & 5 & 20 & 19 & 16 & 1 & 8 & 6
 \end{array}$$
  

$$\begin{array}{r}
 + 9 & + 10 & + 3 & + 11 & - 6 & - 13 & - 4 & - 16 & - 23 & + 6 \\
 + 8 & + 4 & + 12 & + 4 & - 2 & - 2 & + 3 & - 9 & - 11 & + 1 \\
 \hline
 17 & 14 & 15 & 15 & 4 & 11 & 7 & 7 & 12 & 7
 \end{array}$$
  

$$\begin{array}{r}
 - 9 & + 5 & - 9 & + 9 & 4 & 18 & 20 & 14 & 12 & 21 \\
 - 3 & + 5 & - 5 & + 4 & 9 & 8 & 9 & 5 & 4 & - 11 \\
 \hline
 6 & 10 & 4 & 13 & 13 & 10 & 11 & 9 & 16 & 10
 \end{array}$$
  

$$\begin{array}{r}
 - 16 & - 15 & - 20 & + 5 & 11 & - 13 & - 14 & - 11 & 8 & 3 \\
 - 10 & - 12 & - 12 & + 10 & - 10 & - 6 & - 11 & - 1 & 1 & + 6 \\
 \hline
 6 & 3 & 8 & 15 & 1 & 7 & 3 & 10 & 7 & 9
 \end{array}$$
  

$$\begin{array}{r}
 + 7 & + 9 & - 21 & - 16 & + 12 & - 5 & + 9 & + 12 & 8 & 5 \\
 + 10 & + 9 & - 9 & - 9 & + 4 & - 3 & + 6 & + 7 & + 8 & + 8 \\
 \hline
 17 & 18 & 12 & 7 & 16 & 2 & 15 & 19 & 16 & 13
 \end{array}$$
  

$$\begin{array}{r}
 + 8 & - 14 & - 16 & - 5 & + 6 & + 7 & + 5 & + 3 & - 11 & - 17 \\
 + 8 & - 12 & - 4 & - 2 & + 6 & 14 & 6 & 5 & 2 & 9 \\
 \hline
 16 & 2 & 12 & 3 & 12 & 14 & 6 & 5 & 2 & 8
 \end{array}$$

# Opérations Mixtes (D)

## Complétez les exercices suivants

$$\begin{array}{r}
 -19 \\
 -12 \\
 \hline
 -10
 \end{array}
 \quad
 \begin{array}{r}
 -6 \\
 -5 \\
 \hline
 -11
 \end{array}
 \quad
 \begin{array}{r}
 -7 \\
 +2 \\
 \hline
 -6
 \end{array}
 \quad
 \begin{array}{r}
 +4 \\
 -3 \\
 \hline
 -6
 \end{array}
 \quad
 \begin{array}{r}
 -12 \\
 +12 \\
 \hline
 4
 \end{array}
 \quad
 \begin{array}{r}
 +9 \\
 +7 \\
 \hline
 16
 \end{array}$$

$$\begin{array}{r}
 + 10 \\
 + 1 \\
 \hline
 - 20 \\
 - 8 \\
 \hline
 + 4 \\
 + 5 \\
 \hline
 + 11 \\
 + 12 \\
 \hline
 - 13 \\
 - 11 \\
 \hline
 + 3 \\
 + 2 \\
 \hline
 + 11 \\
 + 6 \\
 \hline
 + 3 \\
 + 1 \\
 \hline
 + 10 \\
 + 1 \\
 \hline
 + 6 \\
 + 4
 \end{array}$$

$$\begin{array}{r}
 + \quad 4 \\
 + \quad 2 \\
 \hline
 - \quad 12 \\
 - \quad 6 \\
 \hline
 - \quad 1 \\
 - \quad 1 \\
 \hline
 + \quad 2 \\
 + \quad 10 \\
 \hline
 - \quad 16 \\
 - \quad 5 \\
 \hline
 + \quad 12 \\
 + \quad 3 \\
 \hline
 + \quad 1 \\
 + \quad 1 \\
 \hline
 - \quad 13 \\
 - \quad 3 \\
 \hline
 + \quad 10 \\
 + \quad 7 \\
 \hline
 \end{array}$$

$$-\frac{15}{5} - \frac{3}{2} - \frac{7}{4} + \frac{10}{11} - \frac{13}{9} + \frac{8}{4} - \frac{23}{12} - \frac{6}{2} - \frac{9}{6} - \frac{9}{8}$$

$$-\frac{8}{3} - \frac{15}{10} + \frac{6}{7} - \frac{21}{10} - \frac{18}{11} + \frac{4}{6} - \frac{14}{11} - \frac{11}{8} - \frac{8}{1} - \frac{14}{9}$$

$$-\frac{16}{7} + \frac{12}{10} + \frac{5}{9} + \frac{12}{3} - \frac{16}{7} - \frac{11}{3} - \frac{5}{3} - \frac{5}{2} - \frac{6}{5} - \frac{19}{8}$$

$$+ \begin{array}{r} 6 \\ 8 \end{array} - \begin{array}{r} 20 \\ 9 \end{array} + \begin{array}{r} 4 \\ 12 \end{array} + \begin{array}{r} 10 \\ 10 \end{array} + \begin{array}{r} 11 \\ 5 \end{array} - \begin{array}{r} 12 \\ 3 \end{array} - \begin{array}{r} 15 \\ 3 \end{array} + \begin{array}{r} 10 \\ 1 \end{array} + \begin{array}{r} 1 \\ 8 \end{array} + \begin{array}{r} 5 \\ 2 \end{array}$$

$$+ \begin{array}{r} 4 \\ 2 \end{array} - \begin{array}{r} 19 \\ 12 \end{array} + \begin{array}{r} 7 \\ 2 \end{array} - \begin{array}{r} 20 \\ 12 \end{array} + \begin{array}{r} 3 \\ 7 \end{array} + \begin{array}{r} 5 \\ 8 \end{array} - \begin{array}{r} 15 \\ 11 \end{array} + \begin{array}{r} 8 \\ 8 \end{array} + \begin{array}{r} 4 \\ 5 \end{array} + \begin{array}{r} 3 \\ 10 \end{array}$$

$$+ \begin{array}{r} 6 \\ 9 \end{array} + \begin{array}{r} 6 \\ 6 \end{array} + \begin{array}{r} 2 \\ 1 \end{array} - \begin{array}{r} 18 \\ 8 \end{array} - \begin{array}{r} 20 \\ 8 \end{array} - \begin{array}{r} 17 \\ 5 \end{array} + \begin{array}{r} 10 \\ 11 \end{array} + \begin{array}{r} 11 \\ 6 \end{array} - \begin{array}{r} 14 \\ 5 \end{array} - \begin{array}{r} 13 \\ 11 \end{array}$$

$$-\frac{15}{12} - \frac{12}{8} - \frac{14}{12} + \frac{5}{6} + \frac{3}{7} + \frac{2}{3} + \frac{2}{6} + \frac{5}{6} - \frac{13}{4} - \frac{13}{7}$$

# Opérations Mixtes Solutions (D)

Complétez les exercices suivants

$$\begin{array}{r} -19 \\ -12 \\ \hline 7 \end{array} \quad \begin{array}{r} -16 \\ -10 \\ \hline 6 \end{array} \quad \begin{array}{r} -6 \\ -2 \\ \hline 4 \end{array} \quad \begin{array}{r} -11 \\ -5 \\ \hline 6 \end{array} \quad \begin{array}{r} -7 \\ -6 \\ \hline 1 \end{array} \quad \begin{array}{r} +4 \\ +2 \\ \hline 6 \end{array} \quad \begin{array}{r} -6 \\ -3 \\ \hline 3 \end{array} \quad \begin{array}{r} -12 \\ -6 \\ \hline 6 \end{array} \quad \begin{array}{r} +4 \\ +12 \\ \hline 16 \end{array} \quad \begin{array}{r} +9 \\ +7 \\ \hline 16 \end{array}$$
$$\begin{array}{r} +10 \\ +1 \\ \hline 11 \end{array} \quad \begin{array}{r} -20 \\ -8 \\ \hline 12 \end{array} \quad \begin{array}{r} +4 \\ +5 \\ \hline 9 \end{array} \quad \begin{array}{r} +11 \\ +12 \\ \hline 23 \end{array} \quad \begin{array}{r} -13 \\ -11 \\ \hline 2 \end{array} \quad \begin{array}{r} +3 \\ +2 \\ \hline 5 \end{array} \quad \begin{array}{r} +11 \\ +6 \\ \hline 17 \end{array} \quad \begin{array}{r} +3 \\ +1 \\ \hline 4 \end{array} \quad \begin{array}{r} +10 \\ +1 \\ \hline 11 \end{array} \quad \begin{array}{r} +6 \\ +4 \\ \hline 10 \end{array}$$
$$\begin{array}{r} +4 \\ +2 \\ \hline 6 \end{array} \quad \begin{array}{r} -12 \\ -1 \\ \hline 11 \end{array} \quad \begin{array}{r} -16 \\ -6 \\ \hline 10 \end{array} \quad \begin{array}{r} -7 \\ -1 \\ \hline 6 \end{array} \quad \begin{array}{r} -2 \\ -1 \\ \hline 12 \end{array} \quad \begin{array}{r} -16 \\ -5 \\ \hline 11 \end{array} \quad \begin{array}{r} -12 \\ -3 \\ \hline 15 \end{array} \quad \begin{array}{r} -2 \\ -1 \\ \hline 3 \end{array} \quad \begin{array}{r} -13 \\ -3 \\ \hline 10 \end{array} \quad \begin{array}{r} -10 \\ -7 \\ \hline 17 \end{array}$$
$$\begin{array}{r} -15 \\ -5 \\ \hline 10 \end{array} \quad \begin{array}{r} 3 \\ -2 \\ \hline 1 \end{array} \quad \begin{array}{r} 7 \\ -4 \\ \hline 3 \end{array} \quad \begin{array}{r} 10 \\ +11 \\ \hline 21 \end{array} \quad \begin{array}{r} 13 \\ -9 \\ \hline 4 \end{array} \quad \begin{array}{r} 8 \\ +4 \\ \hline 12 \end{array} \quad \begin{array}{r} 23 \\ -12 \\ \hline 11 \end{array} \quad \begin{array}{r} 6 \\ -2 \\ \hline 4 \end{array} \quad \begin{array}{r} 9 \\ -6 \\ \hline 3 \end{array} \quad \begin{array}{r} 9 \\ -8 \\ \hline 1 \end{array}$$
$$\begin{array}{r} -8 \\ -3 \\ \hline 5 \end{array} \quad \begin{array}{r} -15 \\ -10 \\ \hline 5 \end{array} \quad \begin{array}{r} 6 \\ +7 \\ \hline 13 \end{array} \quad \begin{array}{r} 21 \\ -10 \\ \hline 11 \end{array} \quad \begin{array}{r} 18 \\ -11 \\ \hline 7 \end{array} \quad \begin{array}{r} 4 \\ +6 \\ \hline 10 \end{array} \quad \begin{array}{r} 14 \\ -11 \\ \hline 3 \end{array} \quad \begin{array}{r} 11 \\ -8 \\ \hline 3 \end{array} \quad \begin{array}{r} 8 \\ -1 \\ \hline 7 \end{array} \quad \begin{array}{r} 14 \\ -9 \\ \hline 5 \end{array}$$
$$\begin{array}{r} -16 \\ -7 \\ \hline 9 \end{array} \quad \begin{array}{r} 12 \\ +10 \\ \hline 22 \end{array} \quad \begin{array}{r} 5 \\ +9 \\ \hline 14 \end{array} \quad \begin{array}{r} 12 \\ +3 \\ \hline 15 \end{array} \quad \begin{array}{r} 16 \\ -7 \\ \hline 9 \end{array} \quad \begin{array}{r} 11 \\ -3 \\ \hline 8 \end{array} \quad \begin{array}{r} 5 \\ -3 \\ \hline 2 \end{array} \quad \begin{array}{r} 5 \\ -2 \\ \hline 3 \end{array} \quad \begin{array}{r} 6 \\ -5 \\ \hline 1 \end{array} \quad \begin{array}{r} 19 \\ -8 \\ \hline 11 \end{array}$$
$$\begin{array}{r} +6 \\ +8 \\ \hline 14 \end{array} \quad \begin{array}{r} -20 \\ -9 \\ \hline 11 \end{array} \quad \begin{array}{r} 4 \\ +12 \\ \hline 16 \end{array} \quad \begin{array}{r} 10 \\ +10 \\ \hline 20 \end{array} \quad \begin{array}{r} 11 \\ +5 \\ \hline 16 \end{array} \quad \begin{array}{r} 12 \\ -3 \\ \hline 9 \end{array} \quad \begin{array}{r} 15 \\ -3 \\ \hline 12 \end{array} \quad \begin{array}{r} 10 \\ +1 \\ \hline 11 \end{array} \quad \begin{array}{r} 1 \\ +8 \\ \hline 9 \end{array} \quad \begin{array}{r} 5 \\ +2 \\ \hline 7 \end{array}$$
$$\begin{array}{r} +4 \\ +2 \\ \hline 6 \end{array} \quad \begin{array}{r} -19 \\ -12 \\ \hline 7 \end{array} \quad \begin{array}{r} 7 \\ +2 \\ \hline 9 \end{array} \quad \begin{array}{r} -20 \\ -12 \\ \hline 8 \end{array} \quad \begin{array}{r} 3 \\ +7 \\ \hline 10 \end{array} \quad \begin{array}{r} 5 \\ +8 \\ \hline 13 \end{array} \quad \begin{array}{r} 15 \\ -11 \\ \hline 4 \end{array} \quad \begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array} \quad \begin{array}{r} 4 \\ +5 \\ \hline 9 \end{array} \quad \begin{array}{r} 3 \\ +10 \\ \hline 13 \end{array}$$
$$\begin{array}{r} +6 \\ +9 \\ \hline 15 \end{array} \quad \begin{array}{r} 6 \\ +6 \\ \hline 12 \end{array} \quad \begin{array}{r} 2 \\ +1 \\ \hline 3 \end{array} \quad \begin{array}{r} 18 \\ -8 \\ \hline 10 \end{array} \quad \begin{array}{r} 20 \\ -8 \\ \hline 12 \end{array} \quad \begin{array}{r} 17 \\ -5 \\ \hline 12 \end{array} \quad \begin{array}{r} 10 \\ +11 \\ \hline 21 \end{array} \quad \begin{array}{r} 11 \\ +6 \\ \hline 17 \end{array} \quad \begin{array}{r} 14 \\ -5 \\ \hline 9 \end{array} \quad \begin{array}{r} 13 \\ -11 \\ \hline 2 \end{array}$$
$$\begin{array}{r} -15 \\ -12 \\ \hline 3 \end{array} \quad \begin{array}{r} -12 \\ -8 \\ \hline 4 \end{array} \quad \begin{array}{r} -14 \\ -12 \\ \hline 2 \end{array} \quad \begin{array}{r} 5 \\ +6 \\ \hline 11 \end{array} \quad \begin{array}{r} 3 \\ +7 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ +3 \\ \hline 5 \end{array} \quad \begin{array}{r} 2 \\ +6 \\ \hline 8 \end{array} \quad \begin{array}{r} 5 \\ +6 \\ \hline 11 \end{array} \quad \begin{array}{r} 13 \\ -4 \\ \hline 9 \end{array} \quad \begin{array}{r} 13 \\ -7 \\ \hline 6 \end{array}$$

## Opérations Mixtes (E)

## Complétez les exercices suivants

$$\begin{array}{r}
 1 & -16 & 3 & 9 & 8 & 1 & -16 & 6 & 4 & 8 \\
 + 6 & - 6 & + 4 & + 3 & + 3 & + 12 & - 10 & + 3 & - 2 & + 9 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 -\frac{8}{5} + \frac{8}{7} - \frac{9}{5} - \frac{17}{11} + \frac{11}{6} - \frac{8}{1} - \frac{5}{2} - \frac{20}{12} + \frac{9}{11} + \frac{5}{3}
 \end{array}$$

$$-\frac{18}{7} - \frac{17}{9} - \frac{12}{9} - \frac{7}{6} + \frac{9}{12} - \frac{11}{8} - \frac{10}{3} - \frac{12}{11} + \frac{7}{8} - \frac{20}{12}$$

$$+ \begin{array}{r} 6 \\ 7 \end{array} + \begin{array}{r} 1 \\ 5 \end{array} - \begin{array}{r} 19 \\ 9 \end{array} - \begin{array}{r} 20 \\ 8 \end{array} - \begin{array}{r} 17 \\ 12 \end{array} + \begin{array}{r} 6 \\ 2 \end{array} + \begin{array}{r} 9 \\ 4 \end{array} - \begin{array}{r} 8 \\ 5 \end{array} - \begin{array}{r} 15 \\ 4 \end{array} - \begin{array}{r} 10 \\ 9 \end{array}$$

$$-\frac{12}{10} - \frac{3}{1} + \frac{3}{10} + \frac{7}{10} + \frac{11}{5} + \frac{10}{6} + \frac{11}{11} + \frac{8}{4} + \frac{4}{11} + \frac{9}{3}$$

$$+ \frac{7}{12} + \frac{10}{4} - \frac{6}{4} - \frac{7}{5} - \frac{3}{2} - \frac{15}{4} + \frac{3}{3} - \frac{9}{2} - \frac{10}{7} + \frac{12}{3}$$

$$+ \frac{2}{10} - \frac{11}{1} - \frac{15}{11} - \frac{10}{1} + \frac{1}{1} - \frac{12}{10} + \frac{1}{4} - \frac{13}{10} + \frac{12}{9} - \frac{12}{8}$$

$$= \frac{19}{7} + \frac{7}{8} - \frac{20}{9} + \frac{7}{12} - \frac{24}{12} - \frac{13}{8} - \frac{11}{8} - \frac{10}{2} + \frac{9}{7} + \frac{2}{2}$$

$$+ \frac{6}{7} + \frac{5}{8} + \frac{7}{5} + \frac{4}{8} = \frac{13}{7} + \frac{12}{5} - \frac{19}{7} + \frac{5}{6} = \frac{10}{3} + \frac{2}{11}$$

$$= \frac{14}{4} = \frac{8}{6} + \frac{7}{2} + \frac{9}{9} = \frac{11}{2} = \frac{10}{9} = \frac{20}{8} + \frac{1}{11} = \frac{19}{11} + \frac{6}{5}$$

# Opérations Mixtes Solutions (E)

Complétez les exercices suivants

$$\begin{array}{r} 1 \\ + 6 \\ \hline 7 \end{array} \quad \begin{array}{r} 16 \\ - 6 \\ \hline 10 \end{array} \quad \begin{array}{r} 3 \\ + 4 \\ \hline 7 \end{array} \quad \begin{array}{r} 9 \\ + 3 \\ \hline 12 \end{array} \quad \begin{array}{r} 8 \\ + 3 \\ \hline 11 \end{array} \quad \begin{array}{r} 1 \\ + 12 \\ \hline 13 \end{array} \quad \begin{array}{r} 16 \\ - 10 \\ \hline 6 \end{array} \quad \begin{array}{r} 6 \\ + 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 4 \\ - 2 \\ \hline 2 \end{array} \quad \begin{array}{r} 8 \\ + 9 \\ \hline 17 \end{array}$$
$$\begin{array}{r} 8 \\ - 5 \\ \hline 3 \end{array} \quad \begin{array}{r} 8 \\ + 7 \\ \hline 15 \end{array} \quad \begin{array}{r} 9 \\ - 5 \\ \hline 4 \end{array} \quad \begin{array}{r} 17 \\ - 11 \\ \hline 6 \end{array} \quad \begin{array}{r} 11 \\ + 6 \\ \hline 17 \end{array} \quad \begin{array}{r} 8 \\ - 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 5 \\ - 2 \\ \hline 3 \end{array} \quad \begin{array}{r} 20 \\ - 12 \\ \hline 8 \end{array} \quad \begin{array}{r} 9 \\ + 11 \\ \hline 20 \end{array} \quad \begin{array}{r} 5 \\ + 3 \\ \hline 8 \end{array}$$
$$\begin{array}{r} 18 \\ - 7 \\ \hline 11 \end{array} \quad \begin{array}{r} 17 \\ - 9 \\ \hline 8 \end{array} \quad \begin{array}{r} 12 \\ - 9 \\ \hline 3 \end{array} \quad \begin{array}{r} 7 \\ - 6 \\ \hline 1 \end{array} \quad \begin{array}{r} 9 \\ + 12 \\ \hline 21 \end{array} \quad \begin{array}{r} 11 \\ - 8 \\ \hline 3 \end{array} \quad \begin{array}{r} 10 \\ - 3 \\ \hline 7 \end{array} \quad \begin{array}{r} 12 \\ - 11 \\ \hline 1 \end{array} \quad \begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array} \quad \begin{array}{r} 20 \\ - 12 \\ \hline 8 \end{array}$$
$$\begin{array}{r} 6 \\ + 7 \\ \hline 13 \end{array} \quad \begin{array}{r} 1 \\ + 5 \\ \hline 6 \end{array} \quad \begin{array}{r} 19 \\ - 9 \\ \hline 10 \end{array} \quad \begin{array}{r} 20 \\ - 8 \\ \hline 12 \end{array} \quad \begin{array}{r} 17 \\ - 12 \\ \hline 5 \end{array} \quad \begin{array}{r} 6 \\ + 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 9 \\ + 4 \\ \hline 13 \end{array} \quad \begin{array}{r} 8 \\ - 5 \\ \hline 3 \end{array} \quad \begin{array}{r} 15 \\ - 4 \\ \hline 11 \end{array} \quad \begin{array}{r} 10 \\ - 9 \\ \hline 1 \end{array}$$
$$\begin{array}{r} 12 \\ - 10 \\ \hline 2 \end{array} \quad \begin{array}{r} 3 \\ - 1 \\ \hline 2 \end{array} \quad \begin{array}{r} 3 \\ + 10 \\ \hline 13 \end{array} \quad \begin{array}{r} 7 \\ + 10 \\ \hline 17 \end{array} \quad \begin{array}{r} 11 \\ + 5 \\ \hline 16 \end{array} \quad \begin{array}{r} 10 \\ + 6 \\ \hline 16 \end{array} \quad \begin{array}{r} 11 \\ + 11 \\ \hline 22 \end{array} \quad \begin{array}{r} 8 \\ + 4 \\ \hline 12 \end{array} \quad \begin{array}{r} 4 \\ + 11 \\ \hline 15 \end{array} \quad \begin{array}{r} 9 \\ + 3 \\ \hline 12 \end{array}$$
$$\begin{array}{r} 7 \\ + 12 \\ \hline 19 \end{array} \quad \begin{array}{r} 10 \\ + 4 \\ \hline 14 \end{array} \quad \begin{array}{r} 6 \\ - 4 \\ \hline 2 \end{array} \quad \begin{array}{r} 7 \\ - 5 \\ \hline 2 \end{array} \quad \begin{array}{r} 3 \\ - 2 \\ \hline 1 \end{array} \quad \begin{array}{r} 15 \\ - 4 \\ \hline 11 \end{array} \quad \begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array} \quad \begin{array}{r} 9 \\ - 2 \\ \hline 7 \end{array} \quad \begin{array}{r} 10 \\ - 7 \\ \hline 3 \end{array} \quad \begin{array}{r} 12 \\ + 3 \\ \hline 15 \end{array}$$
$$\begin{array}{r} 2 \\ + 10 \\ \hline 12 \end{array} \quad \begin{array}{r} 11 \\ - 1 \\ \hline 10 \end{array} \quad \begin{array}{r} 15 \\ - 11 \\ \hline 4 \end{array} \quad \begin{array}{r} 10 \\ - 1 \\ \hline 9 \end{array} \quad \begin{array}{r} 1 \\ + 1 \\ \hline 2 \end{array} \quad \begin{array}{r} 12 \\ - 10 \\ \hline 2 \end{array} \quad \begin{array}{r} 1 \\ + 4 \\ \hline 5 \end{array} \quad \begin{array}{r} 13 \\ - 10 \\ \hline 3 \end{array} \quad \begin{array}{r} 12 \\ + 9 \\ \hline 21 \end{array} \quad \begin{array}{r} 12 \\ - 8 \\ \hline 4 \end{array}$$
$$\begin{array}{r} 19 \\ - 7 \\ \hline 12 \end{array} \quad \begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array} \quad \begin{array}{r} 20 \\ - 9 \\ \hline 11 \end{array} \quad \begin{array}{r} 7 \\ + 12 \\ \hline 19 \end{array} \quad \begin{array}{r} 24 \\ - 12 \\ \hline 12 \end{array} \quad \begin{array}{r} 13 \\ - 8 \\ \hline 5 \end{array} \quad \begin{array}{r} 11 \\ - 8 \\ \hline 3 \end{array} \quad \begin{array}{r} 10 \\ - 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 9 \\ + 7 \\ \hline 16 \end{array} \quad \begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array}$$
$$\begin{array}{r} 6 \\ + 7 \\ \hline 13 \end{array} \quad \begin{array}{r} 5 \\ + 8 \\ \hline 13 \end{array} \quad \begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array} \quad \begin{array}{r} 4 \\ + 8 \\ \hline 12 \end{array} \quad \begin{array}{r} 13 \\ - 7 \\ \hline 6 \end{array} \quad \begin{array}{r} 12 \\ + 5 \\ \hline 17 \end{array} \quad \begin{array}{r} 19 \\ - 7 \\ \hline 12 \end{array} \quad \begin{array}{r} 5 \\ + 6 \\ \hline 11 \end{array} \quad \begin{array}{r} 10 \\ - 3 \\ \hline 7 \end{array} \quad \begin{array}{r} 2 \\ + 11 \\ \hline 13 \end{array}$$
$$\begin{array}{r} 14 \\ - 4 \\ \hline 10 \end{array} \quad \begin{array}{r} 8 \\ - 6 \\ \hline 2 \end{array} \quad \begin{array}{r} 7 \\ + 2 \\ \hline 9 \end{array} \quad \begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array} \quad \begin{array}{r} 11 \\ - 2 \\ \hline 9 \end{array} \quad \begin{array}{r} 10 \\ - 9 \\ \hline 1 \end{array} \quad \begin{array}{r} 20 \\ - 8 \\ \hline 12 \end{array} \quad \begin{array}{r} 1 \\ + 11 \\ \hline 12 \end{array} \quad \begin{array}{r} 19 \\ - 11 \\ \hline 8 \end{array} \quad \begin{array}{r} 6 \\ + 5 \\ \hline 11 \end{array}$$

## Opérations Mixtes (F)

## Complétez les exercices suivants

$$\begin{array}{r}
 -2 \\
 -1 \\
 \hline
 -18 \\
 -10 \\
 \hline
 -3 \\
 -1 \\
 \hline
 +12 \\
 +4 \\
 \hline
 +5 \\
 +10 \\
 \hline
 +11 \\
 +6 \\
 \hline
 +2 \\
 +10 \\
 \hline
 +12 \\
 +6 \\
 \hline
 -15 \\
 -9 \\
 \hline
 -3
 \end{array}$$

$$\begin{array}{r}
 + \quad 5 \\
 + \quad 7 \\
 \hline
 - \quad 13 \\
 - \quad 6 \\
 \hline
 + \quad 6 \\
 + \quad 2 \\
 \hline
 - \quad 13 \\
 - \quad 11 \\
 \hline
 - \quad 5 \\
 - \quad 4 \\
 \hline
 + \quad 5 \\
 + \quad 4 \\
 \hline
 - \quad 11 \\
 - \quad 5 \\
 \hline
 - \quad 15 \\
 - \quad 10 \\
 \hline
 + \quad 3 \\
 + \quad 2 \\
 \hline
 - \quad 7 \\
 - \quad 4
 \end{array}$$

$$\begin{array}{r}
 + \frac{5}{10} \\
 + \frac{9}{8} \\
 - \frac{4}{2} \\
 - \frac{11}{4} \\
 + \frac{12}{8} \\
 - \frac{21}{9} \\
 - \frac{17}{10} \\
 - \frac{19}{7} \\
 + \frac{7}{6} \\
 - \frac{19}{9}
 \end{array}$$

$$-\frac{15}{9} + \frac{6}{2} + \frac{2}{4} - \frac{15}{12} - \frac{16}{5} + \frac{1}{9} + \frac{9}{12} + \frac{8}{9} + \frac{6}{2} - \frac{15}{10}$$

$$-\frac{12}{9} + \frac{5}{5} + \frac{11}{8} - \frac{14}{7} + \frac{11}{9} + \frac{5}{2} - \frac{12}{9} - \frac{16}{8} + \frac{2}{9} + \frac{1}{7}$$

$$+ \begin{array}{r} 4 \\ 7 \end{array} - \begin{array}{r} 14 \\ 4 \end{array} - \begin{array}{r} 18 \\ 8 \end{array} - \begin{array}{r} 13 \\ 6 \end{array} - \begin{array}{r} 23 \\ 11 \end{array} + \begin{array}{r} 10 \\ 2 \end{array} - \begin{array}{r} 14 \\ 10 \end{array} + \begin{array}{r} 4 \\ 7 \end{array} + \begin{array}{r} 6 \\ 9 \end{array} + \begin{array}{r} 7 \\ 8 \end{array}$$

$$-\frac{16}{6} + \frac{12}{8} - \frac{5}{4} - \frac{12}{5} - \frac{12}{4} = \frac{8}{1} + 11 + \frac{3}{11} + \frac{8}{12} + \frac{5}{3}$$

$$= \frac{9}{6} = \frac{22}{10} = \frac{14}{7} = \frac{12}{6} + \frac{5}{8} = \frac{11}{1} + \frac{5}{1} = \frac{14}{6} + \frac{5}{5} + \frac{2}{9}$$

$$+ \frac{3}{8} - \frac{6}{3} - \frac{7}{4} - \frac{20}{12} + \frac{3}{7} - \frac{16}{12} + \frac{12}{9} - \frac{4}{2} + \frac{9}{7} - \frac{12}{2}$$

$$-\frac{8}{4} - \frac{9}{3} + \frac{4}{2} - \frac{14}{7} + \frac{11}{8} + \frac{1}{8} - \frac{7}{4} - \frac{15}{7} - \frac{8}{1} + \frac{11}{1}$$

# Opérations Mixtes Solutions (F)

Complétez les exercices suivants

$$\begin{array}{r}
 - & 2 & - & 18 & - & 3 & + & 12 & + & 5 & + & 11 & + & 2 & + & 12 & - & 15 & - & 6 \\
 \hline
 - & 1 & - & 10 & - & 1 & + & 4 & + & 10 & + & 6 & + & 10 & + & 6 & - & 9 & - & 3 \\
 \hline
 & 1 & & 8 & & 2 & & 16 & & 15 & & 17 & & 12 & & 18 & & 6 & & 3
 \end{array}$$
  

$$\begin{array}{r}
 + & 5 & - & 13 & + & 6 & - & 13 & - & 5 & + & 5 & - & 11 & - & 10 & + & 3 & - & 7 \\
 \hline
 + & 7 & - & 6 & + & 2 & - & 11 & - & 4 & + & 4 & - & 5 & - & 5 & + & 2 & - & 4 \\
 \hline
 & 12 & & 7 & & 8 & & 2 & & 1 & & 9 & & 6 & & 5 & & 5 & & 3
 \end{array}$$
  

$$\begin{array}{r}
 + & 5 & + & 9 & - & 4 & - & 11 & + & 12 & - & 9 & - & 10 & - & 7 & + & 7 & - & 19 \\
 \hline
 + & 10 & + & 8 & - & 2 & - & 4 & + & 8 & - & 9 & - & 10 & - & 7 & + & 6 & - & 9 \\
 \hline
 & 15 & & 17 & & 2 & & 7 & & 20 & & 12 & & 7 & & 12 & & 13 & & 10
 \end{array}$$
  

$$\begin{array}{r}
 - & 15 & + & 6 & + & 2 & - & 15 & - & 16 & + & 1 & + & 9 & + & 8 & + & 6 & - & 15 \\
 \hline
 - & 9 & + & 2 & + & 4 & - & 12 & - & 5 & + & 9 & + & 12 & + & 9 & + & 2 & - & 10 \\
 \hline
 & 6 & & 8 & & 6 & & 3 & & 11 & & 10 & & 21 & & 17 & & 8 & & 5
 \end{array}$$
  

$$\begin{array}{r}
 - & 12 & + & 5 & + & 11 & - & 14 & + & 11 & + & 5 & - & 12 & - & 16 & + & 2 & - & 1 \\
 \hline
 - & 9 & + & 5 & + & 8 & - & 7 & + & 9 & + & 2 & - & 9 & - & 8 & + & 9 & + & 7 \\
 \hline
 & 3 & & 10 & & 19 & & 7 & & 20 & & 7 & & 3 & & 8 & & 11 & & 8
 \end{array}$$
  

$$\begin{array}{r}
 + & 4 & - & 14 & - & 18 & - & 13 & - & 23 & + & 10 & - & 14 & - & 4 & + & 6 & - & 7 \\
 \hline
 + & 7 & - & 4 & - & 8 & - & 6 & - & 11 & + & 2 & - & 10 & + & 7 & + & 9 & + & 8 \\
 \hline
 & 11 & & 10 & & 10 & & 7 & & 12 & & 12 & & 4 & & 11 & & 15 & & 15
 \end{array}$$
  

$$\begin{array}{r}
 - & 16 & + & 12 & - & 5 & - & 12 & - & 12 & - & 1 & + & 11 & + & 11 & + & 12 & + & 5 \\
 \hline
 - & 6 & + & 8 & - & 4 & - & 5 & - & 4 & - & 1 & + & 11 & + & 11 & + & 12 & + & 3 \\
 \hline
 & 10 & & 20 & & 1 & & 7 & & 8 & & 7 & & 12 & & 14 & & 20 & & 8
 \end{array}$$
  

$$\begin{array}{r}
 - & 9 & - & 22 & - & 14 & - & 12 & - & 5 & - & 11 & - & 5 & - & 14 & - & 5 & - & 2 \\
 \hline
 - & 6 & - & 10 & - & 7 & - & 6 & + & 8 & - & 1 & + & 1 & - & 6 & + & 5 & + & 9 \\
 \hline
 & 3 & & 12 & & 7 & & 6 & & 13 & & 10 & & 6 & & 8 & & 10 & & 11
 \end{array}$$
  

$$\begin{array}{r}
 + & 3 & - & 6 & - & 7 & - & 20 & - & 3 & - & 16 & - & 12 & - & 4 & - & 9 & - & 12 \\
 \hline
 + & 8 & - & 3 & - & 4 & - & 12 & + & 7 & - & 12 & + & 9 & - & 2 & + & 7 & - & 2 \\
 \hline
 & 11 & & 3 & & 3 & & 8 & & 10 & & 4 & & 21 & & 2 & & 16 & & 10
 \end{array}$$
  

$$\begin{array}{r}
 - & 8 & - & 3 & + & 4 & - & 14 & + & 11 & + & 1 & - & 7 & - & 15 & - & 8 & - & 11 \\
 \hline
 - & 4 & - & 3 & + & 2 & - & 7 & + & 8 & + & 8 & - & 4 & - & 7 & - & 1 & + & 1 \\
 \hline
 & 4 & & 6 & & 6 & & 7 & & 19 & & 9 & & 3 & & 8 & & 7 & & 12
 \end{array}$$

# Opérations Mixtes (G)

## Complétez les exercices suivants

$$\begin{array}{r}
 -14 \\
 -3 \\
 \hline
 -1
 \end{array}
 \quad
 \begin{array}{r}
 +3 \\
 +3 \\
 \hline
 +6
 \end{array}
 \quad
 \begin{array}{r}
 +5 \\
 +3 \\
 \hline
 +8
 \end{array}
 \quad
 \begin{array}{r}
 -15 \\
 -6 \\
 \hline
 -9
 \end{array}
 \quad
 \begin{array}{r}
 -20 \\
 -12 \\
 \hline
 -8
 \end{array}
 \quad
 \begin{array}{r}
 -6 \\
 -3 \\
 \hline
 -9
 \end{array}
 \quad
 \begin{array}{r}
 +4 \\
 +11 \\
 \hline
 +15
 \end{array}
 \quad
 \begin{array}{r}
 -4 \\
 -4 \\
 \hline
 -8
 \end{array}
 \quad
 \begin{array}{r}
 +9 \\
 +9 \\
 \hline
 +18
 \end{array}
 \quad
 \begin{array}{r}
 +18 \\
 +9 \\
 \hline
 +27
 \end{array}
 \quad
 \begin{array}{r}
 +6 \\
 +3 \\
 \hline
 +9
 \end{array}$$

$$\begin{array}{r} -10 \\ -9 \\ \hline +4 \\ +10 \\ \hline +9 \\ +5 \\ \hline +3 \\ +2 \\ \hline -10 \\ -7 \\ \hline -14 \\ -5 \\ \hline +8 \\ +7 \\ \hline +10 \\ +7 \\ \hline +6 \\ +1 \\ \hline +7 \\ +3 \end{array}$$

$$\begin{array}{r}
 + \quad 5 \\
 + \quad 6 \\
 \hline
 - \quad 13 \\
 - \quad 7 \\
 \hline
 + \quad 11 \\
 + \quad 7 \\
 \hline
 - \quad 15 \\
 - \quad 6 \\
 \hline
 - \quad 8 \\
 - \quad 6 \\
 \hline
 - \quad 7 \\
 - \quad 1 \\
 \hline
 - \quad 7 \\
 - \quad 4 \\
 \hline
 - \quad 8 \\
 - \quad 1 \\
 \hline
 + \quad 2 \\
 + \quad 9 \\
 \hline
 + \quad 3 \\
 + \quad 11 \\
 \hline
 \end{array}$$

$$-\frac{12}{4} + \frac{2}{7} + \frac{5}{8} + \frac{6}{10} - \frac{18}{12} + \frac{6}{11} + \frac{8}{10} + \frac{3}{5} - \frac{18}{11} - \frac{22}{11}$$

$$-\frac{9}{3} - \frac{16}{9} - \frac{17}{5} + \frac{11}{12} - \frac{3}{1} - \frac{14}{8} - \frac{17}{7} - \frac{8}{6} + \frac{1}{7} + \frac{3}{2}$$

$$+ \frac{1}{11} - \frac{14}{12} + \frac{1}{3} - \frac{10}{7} - \frac{15}{3} + \frac{10}{7} + \frac{1}{9} - \frac{19}{3} - \frac{11}{9} - \frac{15}{9}$$

$$-\frac{22}{11} = \frac{8}{6} - \frac{18}{10} + \frac{5}{11} + \frac{10}{1} + \frac{5}{12} + \frac{11}{12} + \frac{7}{10} = \frac{7}{6} + \frac{2}{8}$$

$$= \frac{14}{11} + \frac{12}{11} + \frac{1}{10} + \frac{5}{6} = \frac{14}{7} = \frac{10}{3} + \frac{5}{3} = \frac{12}{1} = \frac{12}{5} = \frac{8}{2}$$

$$+ \frac{1}{8} - \frac{18}{7} - \frac{14}{7} - \frac{7}{3} + \frac{2}{12} + \frac{1}{11} - \frac{4}{1} + \frac{5}{12} - \frac{13}{6} - \frac{14}{5}$$

$$= \frac{7}{6} = \frac{5}{4} = \frac{16}{5} + \frac{2}{2} + \frac{4}{10} + \frac{3}{7} = \frac{16}{4} + \frac{8}{9} = \frac{6}{2} + \frac{1}{3}$$

# Opérations Mixtes Solutions (G)

## Complétez les exercices suivants

$$\begin{array}{r}
 -\frac{14}{3} \\
 -\frac{3}{11} \\
 \hline
 -\frac{3}{2}
 \end{array}
 \quad
 \begin{array}{r}
 +\frac{5}{3} \\
 +\frac{1}{8} \\
 \hline
 -\frac{1}{2}
 \end{array}
 \quad
 \begin{array}{r}
 -\frac{15}{6} \\
 -\frac{12}{9} \\
 \hline
 -\frac{6}{9}
 \end{array}
 \quad
 \begin{array}{r}
 -\frac{20}{3} \\
 -\frac{3}{8} \\
 \hline
 -\frac{18}{9}
 \end{array}
 \quad
 \begin{array}{r}
 +\frac{4}{11} \\
 +\frac{11}{15} \\
 \hline
 +\frac{6}{9}
 \end{array}
 \quad
 \begin{array}{r}
 -\frac{9}{4} \\
 -\frac{4}{5} \\
 \hline
 -\frac{9}{5}
 \end{array}
 \quad
 \begin{array}{r}
 +\frac{9}{4} \\
 +\frac{4}{5} \\
 \hline
 +\frac{6}{9}
 \end{array}$$

$$\begin{array}{r}
 \frac{10}{-9} & \frac{4}{+10} & \frac{9}{+5} & \frac{3}{+2} & \frac{10}{-7} & \frac{14}{-5} & \frac{8}{+7} & \frac{10}{+7} & \frac{6}{+1} & \frac{7}{+3} \\
 \hline
 1 & 14 & 14 & 5 & 3 & 9 & 15 & 17 & 7 & 10
 \end{array}$$

$$\begin{array}{r}
 + \quad 5 & - \quad 13 & + \quad 11 & - \quad 15 & - \quad 8 & - \quad 7 & - \quad 7 & - \quad 8 & + \quad 2 & + \quad 3 \\
 + \quad 6 & - \quad 7 & + \quad 7 & - \quad 6 & - \quad 6 & - \quad 1 & - \quad 4 & - \quad 1 & + \quad 9 & + \quad 11 \\
 \hline
 11 & 6 & 18 & 9 & 2 & 6 & 3 & 7 & 11 & 14
 \end{array}$$

$$\begin{array}{r}
 -12 & +2 & +5 & +6 & -18 & +6 & +8 & +3 & -18 & -22 \\
 -4 & +7 & +8 & +10 & -12 & +11 & +10 & +5 & -11 & -11 \\
 \hline
 8 & 9 & 13 & 16 & 6 & 17 & 18 & 8 & 7 & 11
 \end{array}$$

$$\begin{array}{r}
 -\frac{9}{3} & -\frac{16}{9} & -\frac{17}{5} & +\frac{11}{12} & -\frac{3}{1} & -\frac{14}{8} & -\frac{17}{7} & -\frac{8}{6} & +\frac{1}{7} & +\frac{3}{2} \\
 \hline
 6 & 7 & 12 & 23 & 2 & 6 & 10 & 2 & 8 & 5
 \end{array}$$

$$\begin{array}{r}
 \frac{1}{+ 11} & \frac{- 14}{12} & \frac{1}{+ 1} & \frac{- 10}{7} & \frac{- 15}{8} & \frac{10}{+ 3} & \frac{1}{+ 7} & \frac{- 19}{9} & \frac{- 11}{8} & \frac{- 15}{6}
 \end{array}$$

$$\begin{array}{r}
 -\frac{22}{11} & -\frac{8}{2} & -\frac{18}{8} & +\frac{5}{16} & +\frac{10}{11} & +\frac{5}{17} & +\frac{11}{23} & +\frac{7}{17} & -\frac{7}{1} & +\frac{2}{10}
 \end{array}$$

$$\begin{array}{r}
 -\frac{14}{11} & +\frac{12}{11} & +\frac{1}{10} & +\frac{5}{6} & -\frac{14}{7} & -\frac{10}{3} & +\frac{5}{3} & -\frac{12}{11} & -\frac{12}{5} & -\frac{8}{2} \\
 \hline
 3 & 23 & 11 & 11 & 7 & 7 & 8 & 11 & 7 & 6
 \end{array}$$

$$\begin{array}{r}
 + \frac{1}{8} & - \frac{18}{7} & - \frac{14}{7} & - \frac{7}{3} & + \frac{2}{12} & + \frac{1}{11} & - \frac{4}{1} & + \frac{5}{12} & - \frac{13}{6} & - \frac{14}{5} \\
 \hline
 9 & - 11 & - 7 & - 4 & 14 & 12 & 3 & 17 & 7 & 9
 \end{array}$$

$$\begin{array}{r}
 -\frac{7}{6} & -\frac{5}{4} & -\frac{16}{5} & +\frac{2}{2} & +\frac{4}{10} & +\frac{3}{7} & -\frac{16}{4} & +\frac{8}{9} & -\frac{6}{2} & +\frac{1}{3}
 \end{array}$$

## Opérations Mixtes (H)

## Complétez les exercices suivants

$$\begin{array}{r}
 + \quad 4 \\
 + \quad 5 \\
 \hline
 - \quad 14 \\
 - \quad 12 \\
 \hline
 - \quad 2 \\
 - \quad 10 \\
 \hline
 + \quad 11 \\
 + \quad 1 \\
 \hline
 - \quad 3 \\
 - \quad 5 \\
 \hline
 + \quad 12 \\
 - \quad 12 \\
 \hline
 + \quad 2 \\
 + \quad 7 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 -15 \\
 -9 \\
 \hline
 -6
 \end{array}
 \quad
 \begin{array}{r}
 -8 \\
 -7 \\
 \hline
 -15
 \end{array}
 \quad
 \begin{array}{r}
 -10 \\
 -9 \\
 \hline
 -19
 \end{array}
 \quad
 \begin{array}{r}
 -17 \\
 -10 \\
 \hline
 -27
 \end{array}
 \quad
 \begin{array}{r}
 -9 \\
 -8 \\
 \hline
 -17
 \end{array}
 \quad
 \begin{array}{r}
 -9 \\
 -7 \\
 \hline
 -16
 \end{array}
 \quad
 \begin{array}{r}
 -18 \\
 -9 \\
 \hline
 -27
 \end{array}
 \quad
 \begin{array}{r}
 +10 \\
 +4 \\
 \hline
 +14
 \end{array}
 \quad
 \begin{array}{r}
 +4 \\
 +9 \\
 \hline
 +13
 \end{array}
 \quad
 \begin{array}{r}
 +2 \\
 +1 \\
 \hline
 +3
 \end{array}$$

$$\begin{array}{r}
 -7 & +5 & -13 & +6 & -6 & +7 & -9 & +1 & -14 & +2 \\
 \underline{-2} & \underline{+6} & \underline{-9} & \underline{+9} & \underline{-3} & \underline{+1} & \underline{-6} & \underline{+8} & \underline{-4} & \underline{+11}
 \end{array}$$

$$\begin{array}{r}
 + \frac{11}{8} \quad + \frac{6}{1} \quad + \frac{6}{1} \quad + \frac{8}{2} \quad - \frac{9}{7} \quad + \frac{12}{7} \quad - \frac{13}{8} \quad + \frac{12}{1} \quad - \frac{13}{2} \quad + \frac{5}{1}
 \end{array}$$

$$\begin{array}{r}
 -14 \\
 -10 \\
 \hline
 -3
 \end{array}
 \quad
 \begin{array}{r}
 +12 \\
 -11 \\
 \hline
 1
 \end{array}
 \quad
 \begin{array}{r}
 +10 \\
 +2 \\
 \hline
 8
 \end{array}
 \quad
 \begin{array}{r}
 +11 \\
 +2 \\
 \hline
 13
 \end{array}
 \quad
 \begin{array}{r}
 +10 \\
 +8 \\
 \hline
 18
 \end{array}
 \quad
 \begin{array}{r}
 -7 \\
 -9 \\
 \hline
 \end{array}$$

$$-\frac{10}{9} - \frac{9}{6} - \frac{9}{5} + \frac{5}{6} - \frac{10}{6} - \frac{7}{4} + \frac{9}{11} - \frac{12}{4} - \frac{13}{11} + \frac{1}{8}$$

$$+ \frac{1}{2} + \frac{12}{1} + \frac{5}{10} - \frac{5}{4} + \frac{11}{9} - \frac{10}{5} - \frac{12}{9} - \frac{4}{1} - \frac{17}{5} + \frac{8}{7}$$

$$+ \begin{array}{r} 9 \\ 8 \end{array} + \begin{array}{r} 8 \\ 6 \end{array} - \begin{array}{r} 7 \\ 6 \end{array} + \begin{array}{r} 7 \\ 8 \end{array} - \begin{array}{r} 9 \\ 8 \end{array} + \begin{array}{r} 2 \\ 8 \end{array} + \begin{array}{r} 4 \\ 1 \end{array} - \begin{array}{r} 13 \\ 8 \end{array} - \begin{array}{r} 19 \\ 8 \end{array} + \begin{array}{r} 9 \\ 10 \end{array}$$

$$-\frac{9}{3} - \frac{14}{3} + \frac{4}{3} - \frac{16}{6} - \frac{12}{6} + \frac{7}{11} + \frac{4}{8} + \frac{2}{3} + \frac{12}{9} - \frac{12}{8}$$

$$-\frac{16}{8} - \frac{24}{12} - \frac{21}{10} + \frac{7}{4} + \frac{6}{7} + \frac{5}{11} + \frac{7}{11} - \frac{16}{11} + \frac{12}{3} - \frac{5}{4}$$

# Opérations Mixtes Solutions (H)

Complétez les exercices suivants

$$\begin{array}{r} 4 \\ + 5 \\ \hline 9 \end{array} \quad \begin{array}{r} 14 \\ - 12 \\ \hline 2 \end{array} \quad \begin{array}{r} 14 \\ - 2 \\ \hline 12 \end{array} \quad \begin{array}{r} 17 \\ - 10 \\ \hline 7 \end{array} \quad \begin{array}{r} 11 \\ + 11 \\ \hline 22 \end{array} \quad \begin{array}{r} 11 \\ + 1 \\ \hline 12 \end{array} \quad \begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array} \quad \begin{array}{r} 12 \\ + 5 \\ \hline 17 \end{array} \quad \begin{array}{r} 24 \\ - 12 \\ \hline 12 \end{array} \quad \begin{array}{r} 2 \\ + 7 \\ \hline 9 \end{array}$$
$$\begin{array}{r} 15 \\ - 9 \\ \hline 6 \end{array} \quad \begin{array}{r} 8 \\ - 7 \\ \hline 1 \end{array} \quad \begin{array}{r} 10 \\ - 9 \\ \hline 1 \end{array} \quad \begin{array}{r} 17 \\ - 10 \\ \hline 7 \end{array} \quad \begin{array}{r} 9 \\ - 8 \\ \hline 1 \end{array} \quad \begin{array}{r} 9 \\ - 7 \\ \hline 2 \end{array} \quad \begin{array}{r} 18 \\ - 9 \\ \hline 9 \end{array} \quad \begin{array}{r} 10 \\ + 4 \\ \hline 14 \end{array} \quad \begin{array}{r} 4 \\ + 9 \\ \hline 13 \end{array} \quad \begin{array}{r} 2 \\ + 1 \\ \hline 3 \end{array}$$
$$\begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array} \quad \begin{array}{r} 5 \\ + 6 \\ \hline 11 \end{array} \quad \begin{array}{r} 13 \\ - 9 \\ \hline 4 \end{array} \quad \begin{array}{r} 6 \\ + 9 \\ \hline 15 \end{array} \quad \begin{array}{r} 6 \\ - 3 \\ \hline 3 \end{array} \quad \begin{array}{r} 7 \\ + 1 \\ \hline 8 \end{array} \quad \begin{array}{r} 9 \\ - 6 \\ \hline 3 \end{array} \quad \begin{array}{r} 1 \\ + 8 \\ \hline 9 \end{array} \quad \begin{array}{r} 14 \\ - 4 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ + 11 \\ \hline 13 \end{array}$$
$$\begin{array}{r} 11 \\ + 8 \\ \hline 19 \end{array} \quad \begin{array}{r} 6 \\ + 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 6 \\ + 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 8 \\ + 2 \\ \hline 10 \end{array} \quad \begin{array}{r} 9 \\ - 7 \\ \hline 2 \end{array} \quad \begin{array}{r} 12 \\ + 7 \\ \hline 19 \end{array} \quad \begin{array}{r} 13 \\ - 8 \\ \hline 5 \end{array} \quad \begin{array}{r} 12 \\ + 1 \\ \hline 13 \end{array} \quad \begin{array}{r} 13 \\ - 2 \\ \hline 11 \end{array} \quad \begin{array}{r} 5 \\ + 1 \\ \hline 6 \end{array}$$
$$\begin{array}{r} 14 \\ - 10 \\ \hline 4 \end{array} \quad \begin{array}{r} 11 \\ - 3 \\ \hline 8 \end{array} \quad \begin{array}{r} 12 \\ + 12 \\ \hline 24 \end{array} \quad \begin{array}{r} 12 \\ - 11 \\ \hline 1 \end{array} \quad \begin{array}{r} 9 \\ + 1 \\ \hline 10 \end{array} \quad \begin{array}{r} 5 \\ + 10 \\ \hline 15 \end{array} \quad \begin{array}{r} 11 \\ + 2 \\ \hline 13 \end{array} \quad \begin{array}{r} 10 \\ + 8 \\ \hline 18 \end{array} \quad \begin{array}{r} 18 \\ - 7 \\ \hline 11 \end{array} \quad \begin{array}{r} 13 \\ - 9 \\ \hline 4 \end{array}$$
$$\begin{array}{r} 10 \\ - 9 \\ \hline 1 \end{array} \quad \begin{array}{r} 9 \\ - 6 \\ \hline 3 \end{array} \quad \begin{array}{r} 9 \\ - 5 \\ \hline 4 \end{array} \quad \begin{array}{r} 5 \\ + 6 \\ \hline 11 \end{array} \quad \begin{array}{r} 10 \\ - 6 \\ \hline 4 \end{array} \quad \begin{array}{r} 7 \\ - 4 \\ \hline 3 \end{array} \quad \begin{array}{r} 9 \\ + 11 \\ \hline 20 \end{array} \quad \begin{array}{r} 12 \\ - 4 \\ \hline 8 \end{array} \quad \begin{array}{r} 13 \\ - 4 \\ \hline 11 \end{array} \quad \begin{array}{r} 1 \\ + 8 \\ \hline 9 \end{array}$$
$$\begin{array}{r} 1 \\ + 2 \\ \hline 3 \end{array} \quad \begin{array}{r} 12 \\ + 1 \\ \hline 13 \end{array} \quad \begin{array}{r} 5 \\ + 10 \\ \hline 15 \end{array} \quad \begin{array}{r} 5 \\ - 4 \\ \hline 1 \end{array} \quad \begin{array}{r} 11 \\ + 9 \\ \hline 20 \end{array} \quad \begin{array}{r} 10 \\ - 5 \\ \hline 5 \end{array} \quad \begin{array}{r} 12 \\ - 9 \\ \hline 3 \end{array} \quad \begin{array}{r} 4 \\ - 1 \\ \hline 3 \end{array} \quad \begin{array}{r} 17 \\ - 5 \\ \hline 12 \end{array} \quad \begin{array}{r} 8 \\ + 7 \\ \hline 15 \end{array}$$
$$\begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array} \quad \begin{array}{r} 8 \\ + 6 \\ \hline 14 \end{array} \quad \begin{array}{r} 7 \\ - 6 \\ \hline 1 \end{array} \quad \begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array} \quad \begin{array}{r} 9 \\ - 8 \\ \hline 1 \end{array} \quad \begin{array}{r} 2 \\ + 8 \\ \hline 10 \end{array} \quad \begin{array}{r} 4 \\ + 1 \\ \hline 5 \end{array} \quad \begin{array}{r} 13 \\ - 8 \\ \hline 5 \end{array} \quad \begin{array}{r} 19 \\ - 8 \\ \hline 11 \end{array} \quad \begin{array}{r} 9 \\ + 10 \\ \hline 19 \end{array}$$
$$\begin{array}{r} 9 \\ - 3 \\ \hline 6 \end{array} \quad \begin{array}{r} 14 \\ - 3 \\ \hline 11 \end{array} \quad \begin{array}{r} 4 \\ + 3 \\ \hline 7 \end{array} \quad \begin{array}{r} 16 \\ - 6 \\ \hline 10 \end{array} \quad \begin{array}{r} 12 \\ - 6 \\ \hline 6 \end{array} \quad \begin{array}{r} 7 \\ + 11 \\ \hline 18 \end{array} \quad \begin{array}{r} 4 \\ + 8 \\ \hline 12 \end{array} \quad \begin{array}{r} 2 \\ + 3 \\ \hline 5 \end{array} \quad \begin{array}{r} 12 \\ + 9 \\ \hline 21 \end{array} \quad \begin{array}{r} 12 \\ - 8 \\ \hline 4 \end{array}$$
$$\begin{array}{r} 16 \\ - 8 \\ \hline 8 \end{array} \quad \begin{array}{r} 24 \\ - 12 \\ \hline 12 \end{array} \quad \begin{array}{r} 21 \\ - 10 \\ \hline 11 \end{array} \quad \begin{array}{r} 7 \\ + 4 \\ \hline 11 \end{array} \quad \begin{array}{r} 6 \\ + 7 \\ \hline 13 \end{array} \quad \begin{array}{r} 5 \\ + 11 \\ \hline 16 \end{array} \quad \begin{array}{r} 7 \\ + 11 \\ \hline 18 \end{array} \quad \begin{array}{r} 16 \\ - 11 \\ \hline 5 \end{array} \quad \begin{array}{r} 12 \\ + 3 \\ \hline 15 \end{array} \quad \begin{array}{r} 5 \\ - 4 \\ \hline 1 \end{array}$$

# Opérations Mixtes (I)

## Complétez les exercices suivants

$$\begin{array}{r}
 + \frac{10}{7} \\
 + \frac{6}{12} \\
 + \frac{3}{9} \\
 + \frac{3}{3} \\
 - \frac{12}{1} \\
 - \frac{4}{1} \\
 - \frac{7}{2} \\
 - \frac{18}{9} \\
 - \frac{17}{10} \\
 - \frac{7}{5}
 \end{array}$$

$$\begin{array}{r}
 + \quad 1 \\
 + \quad 4 \\
 \hline
 + \quad 3 \\
 + \quad 6 \\
 \hline
 + \quad 10 \\
 + \quad 4 \\
 \hline
 + \quad 9 \\
 + \quad 8 \\
 \hline
 + \quad 2 \\
 + \quad 5 \\
 \hline
 - \quad 17 \\
 - \quad 11 \\
 \hline
 + \quad 11 \\
 + \quad 10 \\
 \hline
 - \quad 17 \\
 - \quad 8 \\
 \hline
 + \quad 11 \\
 + \quad 12 \\
 \hline
 - \quad 15 \\
 - \quad 6 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 -21 \\
 -11 \\
 +2 \\
 \hline
 -3
 \end{array}
 \quad
 \begin{array}{r}
 1 \\
 +3 \\
 \hline
 3
 \end{array}
 \quad
 \begin{array}{r}
 -10 \\
 -9 \\
 +1 \\
 \hline
 8
 \end{array}
 \quad
 \begin{array}{r}
 8 \\
 +1 \\
 \hline
 9
 \end{array}
 \quad
 \begin{array}{r}
 +5 \\
 +8 \\
 \hline
 13
 \end{array}
 \quad
 \begin{array}{r}
 7 \\
 -5 \\
 \hline
 2
 \end{array}
 \quad
 \begin{array}{r}
 2 \\
 +7 \\
 \hline
 9
 \end{array}
 \quad
 \begin{array}{r}
 9 \\
 +9 \\
 \hline
 18
 \end{array}$$

$$+ \begin{array}{r} 4 \\ 1 \end{array} \quad + \begin{array}{r} 6 \\ 10 \end{array} \quad - \begin{array}{r} 15 \\ 12 \end{array} \quad + \begin{array}{r} 7 \\ 9 \end{array} \quad - \begin{array}{r} 14 \\ 6 \end{array} \quad - \begin{array}{r} 7 \\ 1 \end{array} \quad + \begin{array}{r} 10 \\ 7 \end{array} \quad + \begin{array}{r} 8 \\ 4 \end{array} \quad - \begin{array}{r} 11 \\ 1 \end{array} \quad + \begin{array}{r} 3 \\ 3 \end{array}$$

$$-\frac{12}{6} + \frac{4}{3} - \frac{17}{12} - \frac{13}{8} + \frac{3}{5} - \frac{8}{3} + \frac{2}{10} - \frac{7}{3} + \frac{3}{5} - \frac{5}{3}$$

$$+ \frac{7}{7} + \frac{12}{2} + \frac{2}{2} - \frac{10}{5} - \frac{19}{12} + \frac{9}{9} + \frac{10}{2} + \frac{12}{7} - \frac{13}{7} + \frac{6}{6}$$

$$+ \frac{5}{11} - \frac{18}{12} + \frac{4}{8} + \frac{6}{9} + \frac{11}{5} - \frac{15}{6} + \frac{3}{2} + \frac{3}{12} - \frac{13}{7} + \frac{12}{7}$$

$$-\frac{11}{1} - \frac{13}{9} + \frac{7}{1} - \frac{14}{4} - \frac{10}{9} - \frac{15}{10} - \frac{20}{9} + \frac{7}{7} + \frac{1}{1} - \frac{17}{11}$$

$$+ \frac{6}{10} - \frac{6}{3} - \frac{11}{1} + \frac{4}{6} + \frac{12}{4} + \frac{12}{12} - \frac{10}{2} - \frac{11}{3} - \frac{10}{2} - \frac{23}{11}$$

$$-\frac{21}{10} + \frac{4}{12} + \frac{9}{9} + \frac{12}{11} - \frac{14}{6} - \frac{12}{1} + \frac{5}{5} + \frac{2}{5} + \frac{3}{11} - \frac{8}{7}$$

# Opérations Mixtes Solutions (I)

Complétez les exercices suivants

$$\begin{array}{r} 10 \\ + 7 \\ \hline 17 \end{array} \quad \begin{array}{r} 6 \\ + 12 \\ \hline 18 \end{array} \quad \begin{array}{r} 3 \\ + 9 \\ \hline 12 \end{array} \quad \begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array} \quad \begin{array}{r} 12 \\ - 1 \\ \hline 11 \end{array} \quad \begin{array}{r} 4 \\ - 1 \\ \hline 3 \end{array} \quad \begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array} \quad \begin{array}{r} 18 \\ - 9 \\ \hline 9 \end{array} \quad \begin{array}{r} 17 \\ - 10 \\ \hline 7 \end{array} \quad \begin{array}{r} 7 \\ - 5 \\ \hline 2 \end{array}$$
$$\begin{array}{r} 1 \\ + 4 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ + 6 \\ \hline 9 \end{array} \quad \begin{array}{r} 10 \\ + 4 \\ \hline 14 \end{array} \quad \begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array} \quad \begin{array}{r} 2 \\ + 5 \\ \hline 7 \end{array} \quad \begin{array}{r} 17 \\ - 11 \\ \hline 6 \end{array} \quad \begin{array}{r} 11 \\ + 10 \\ \hline 21 \end{array} \quad \begin{array}{r} 17 \\ - 8 \\ \hline 9 \end{array} \quad \begin{array}{r} 11 \\ + 12 \\ \hline 23 \end{array} \quad \begin{array}{r} 15 \\ - 6 \\ \hline 9 \end{array}$$
$$\begin{array}{r} 21 \\ - 11 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array} \quad \begin{array}{r} 12 \\ - 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 1 \\ + 3 \\ \hline 4 \end{array} \quad \begin{array}{r} 10 \\ - 9 \\ \hline 1 \end{array} \quad \begin{array}{r} 8 \\ + 1 \\ \hline 9 \end{array} \quad \begin{array}{r} 5 \\ + 8 \\ \hline 13 \end{array} \quad \begin{array}{r} 7 \\ - 5 \\ \hline 2 \end{array} \quad \begin{array}{r} 2 \\ + 7 \\ \hline 9 \end{array} \quad \begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array}$$
$$\begin{array}{r} 4 \\ + 1 \\ \hline 5 \end{array} \quad \begin{array}{r} 6 \\ + 10 \\ \hline 16 \end{array} \quad \begin{array}{r} 15 \\ - 12 \\ \hline 3 \end{array} \quad \begin{array}{r} 7 \\ + 9 \\ \hline 16 \end{array} \quad \begin{array}{r} 14 \\ - 6 \\ \hline 8 \end{array} \quad \begin{array}{r} 7 \\ - 1 \\ \hline 6 \end{array} \quad \begin{array}{r} 10 \\ + 7 \\ \hline 17 \end{array} \quad \begin{array}{r} 8 \\ + 4 \\ \hline 12 \end{array} \quad \begin{array}{r} 11 \\ - 1 \\ \hline 10 \end{array} \quad \begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array}$$
$$\begin{array}{r} 12 \\ - 6 \\ \hline 6 \end{array} \quad \begin{array}{r} 4 \\ + 3 \\ \hline 7 \end{array} \quad \begin{array}{r} 17 \\ - 12 \\ \hline 5 \end{array} \quad \begin{array}{r} 13 \\ - 8 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ + 5 \\ \hline 8 \end{array} \quad \begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array} \quad \begin{array}{r} 2 \\ + 10 \\ \hline 12 \end{array} \quad \begin{array}{r} 7 \\ - 3 \\ \hline 4 \end{array} \quad \begin{array}{r} 3 \\ + 5 \\ \hline 8 \end{array} \quad \begin{array}{r} 5 \\ - 3 \\ \hline 2 \end{array}$$
$$\begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array} \quad \begin{array}{r} 12 \\ + 2 \\ \hline 14 \end{array} \quad \begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array} \quad \begin{array}{r} 10 \\ - 5 \\ \hline 5 \end{array} \quad \begin{array}{r} 19 \\ - 12 \\ \hline 7 \end{array} \quad \begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array} \quad \begin{array}{r} 10 \\ + 2 \\ \hline 12 \end{array} \quad \begin{array}{r} 12 \\ + 7 \\ \hline 19 \end{array} \quad \begin{array}{r} 13 \\ - 7 \\ \hline 6 \end{array} \quad \begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$$
$$\begin{array}{r} 5 \\ + 11 \\ \hline 16 \end{array} \quad \begin{array}{r} 18 \\ - 12 \\ \hline 6 \end{array} \quad \begin{array}{r} 4 \\ + 8 \\ \hline 12 \end{array} \quad \begin{array}{r} 6 \\ + 9 \\ \hline 15 \end{array} \quad \begin{array}{r} 11 \\ + 5 \\ \hline 16 \end{array} \quad \begin{array}{r} 15 \\ - 6 \\ \hline 9 \end{array} \quad \begin{array}{r} 3 \\ + 2 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ + 12 \\ \hline 15 \end{array} \quad \begin{array}{r} 13 \\ - 7 \\ \hline 6 \end{array} \quad \begin{array}{r} 12 \\ + 7 \\ \hline 19 \end{array}$$
$$\begin{array}{r} 11 \\ - 1 \\ \hline 10 \end{array} \quad \begin{array}{r} 13 \\ - 9 \\ \hline 4 \end{array} \quad \begin{array}{r} 7 \\ + 1 \\ \hline 8 \end{array} \quad \begin{array}{r} 14 \\ - 4 \\ \hline 10 \end{array} \quad \begin{array}{r} 10 \\ - 9 \\ \hline 1 \end{array} \quad \begin{array}{r} 15 \\ - 10 \\ \hline 5 \end{array} \quad \begin{array}{r} 20 \\ - 9 \\ \hline 11 \end{array} \quad \begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array} \quad \begin{array}{r} 1 \\ + 1 \\ \hline 2 \end{array} \quad \begin{array}{r} 17 \\ - 11 \\ \hline 6 \end{array}$$
$$\begin{array}{r} 6 \\ + 10 \\ \hline 16 \end{array} \quad \begin{array}{r} 6 \\ - 3 \\ \hline 3 \end{array} \quad \begin{array}{r} 11 \\ - 1 \\ \hline 10 \end{array} \quad \begin{array}{r} 4 \\ + 6 \\ \hline 10 \end{array} \quad \begin{array}{r} 12 \\ + 4 \\ \hline 16 \end{array} \quad \begin{array}{r} 12 \\ + 12 \\ \hline 24 \end{array} \quad \begin{array}{r} 10 \\ - 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 11 \\ - 3 \\ \hline 8 \end{array} \quad \begin{array}{r} 10 \\ - 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 23 \\ - 11 \\ \hline 12 \end{array}$$
$$\begin{array}{r} 21 \\ - 10 \\ \hline 11 \end{array} \quad \begin{array}{r} 4 \\ + 12 \\ \hline 16 \end{array} \quad \begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array} \quad \begin{array}{r} 12 \\ + 11 \\ \hline 23 \end{array} \quad \begin{array}{r} 14 \\ - 6 \\ \hline 8 \end{array} \quad \begin{array}{r} 12 \\ - 1 \\ \hline 11 \end{array} \quad \begin{array}{r} 5 \\ + 5 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ + 5 \\ \hline 7 \end{array} \quad \begin{array}{r} 3 \\ + 11 \\ \hline 14 \end{array} \quad \begin{array}{r} 8 \\ - 7 \\ \hline 1 \end{array}$$

## Opérations Mixtes (J)

## Complétez les exercices suivants

$$\begin{array}{r} 9 \\ + 11 \\ \hline \end{array} \quad \begin{array}{r} 21 \\ - 12 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ - 7 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ - 5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ + 12 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ - 7 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ - 4 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 12 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ + 4 \\ \hline \end{array} \quad \begin{array}{r} 15 \\ - 5 \\ \hline \end{array} \quad \begin{array}{r} 15 \\ - 4 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ - 8 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 2 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ + 5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ - 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 4 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r}
 2 & 21 & 3 & 8 & 2 & 2 & 12 & 16 & 13 & 5 \\
 + 1 & - 10 & + 3 & + 8 & + 9 & + 5 & - 3 & - 6 & - 9 & + 8 \\
 \hline
\end{array}$$

$$\begin{array}{r}
 9 & 1 & 7 & 9 & 10 & 1 & 16 & 8 & 10 & 5 \\
 + 4 & + 10 & + 5 & + 4 & - 8 & + 9 & - 9 & + 8 & - 9 & + 10 \\
 \hline
\end{array}$$

$$\begin{array}{r}
 -13 & +12 & -17 & -9 & -8 & +2 & -12 & -16 & -22 & +8 \\
 -12 & +4 & -8 & -8 & -3 & +10 & -9 & -4 & -10 & +7
 \end{array}$$

$$\begin{array}{r}
 -17 \\
 -5 \\
 \hline
 +3 \\
 +11 \\
 \hline
 -16 \\
 -5 \\
 \hline
 -14 \\
 -2 \\
 \hline
 +7 \\
 +7 \\
 \hline
 +8 \\
 +12 \\
 \hline
 -12 \\
 -11 \\
 \hline
 -17 \\
 -10 \\
 \hline
 +10 \\
 +12 \\
 \hline
 -20 \\
 -11
 \end{array}$$

$$\begin{array}{r}
 -8 \\
 -5 \\
 \hline
 -3
 \end{array}
 \quad
 \begin{array}{r}
 -2 \\
 -1 \\
 \hline
 -1
 \end{array}
 \quad
 \begin{array}{r}
 -8 \\
 -6 \\
 \hline
 -14
 \end{array}
 \quad
 \begin{array}{r}
 -12 \\
 -11 \\
 \hline
 -23
 \end{array}
 \quad
 \begin{array}{r}
 +5 \\
 +7 \\
 \hline
 +12
 \end{array}
 \quad
 \begin{array}{r}
 +8 \\
 +10 \\
 \hline
 +18
 \end{array}
 \quad
 \begin{array}{r}
 +8 \\
 +6 \\
 \hline
 +14
 \end{array}
 \quad
 \begin{array}{r}
 +3 \\
 +6 \\
 \hline
 +9
 \end{array}
 \quad
 \begin{array}{r}
 +4 \\
 +4 \\
 \hline
 +8
 \end{array}
 \quad
 \begin{array}{r}
 -13 \\
 -8 \\
 \hline
 -21
 \end{array}$$

$$\begin{array}{r}
 -2 & +3 & +1 & -13 & -15 & +2 & +3 & -20 & +7 & +1 \\
 -1 & +7 & +11 & -4 & -8 & +3 & +2 & -12 & +4 & +5
 \end{array}$$

$$\begin{array}{ccccccccccccc}
 - & 8 & & 2 & & 1 & & 5 & & 1 & & 13 & & 21 & & 11 & & 2 & & 8 \\
 - & 6 & + & 1 & + & 4 & + & 5 & + & 4 & - & 2 & - & 10 & + & 8 & + & 2 & - & 1
 \end{array}$$

$$\begin{array}{r}
 5 & 7 & 2 & 12 & 10 & 16 & 12 & 8 & 18 & 1 \\
 + 9 & + 7 & + 4 & - 6 & + 5 & - 5 & - 11 & + 4 & - 11 & + 12 \\
 \hline
\end{array}$$

# Opérations Mixtes Solutions (J)

Complétez les exercices suivants

$$\begin{array}{r}
 \begin{array}{r} 9 \\ + 11 \\ \hline 20 \end{array} & \begin{array}{r} 21 \\ - 12 \\ \hline 9 \end{array} & \begin{array}{r} 8 \\ - 7 \\ \hline 1 \end{array} & \begin{array}{r} 11 \\ - 5 \\ \hline 6 \end{array} & \begin{array}{r} 5 \\ + 1 \\ \hline 6 \end{array} & \begin{array}{r} 11 \\ + 3 \\ \hline 14 \end{array} & \begin{array}{r} 11 \\ + 12 \\ \hline 23 \end{array} & \begin{array}{r} 12 \\ - 7 \\ \hline 5 \end{array} & \begin{array}{r} 9 \\ - 4 \\ \hline 5 \end{array} & \begin{array}{r} 3 \\ + 11 \\ \hline 14 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 8 \\ + 12 \\ \hline 20 \end{array} & \begin{array}{r} 1 \\ + 4 \\ \hline 5 \end{array} & \begin{array}{r} 15 \\ - 5 \\ \hline 10 \end{array} & \begin{array}{r} 15 \\ - 4 \\ \hline 11 \end{array} & \begin{array}{r} 12 \\ - 8 \\ \hline 4 \end{array} & \begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array} & \begin{array}{r} 10 \\ + 5 \\ \hline 15 \end{array} & \begin{array}{r} 5 \\ - 2 \\ \hline 3 \end{array} & \begin{array}{r} 2 \\ + 4 \\ \hline 6 \end{array} & \begin{array}{r} 3 \\ + 1 \\ \hline 4 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 2 \\ + 1 \\ \hline 3 \end{array} & \begin{array}{r} 21 \\ - 10 \\ \hline 11 \end{array} & \begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array} & \begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array} & \begin{array}{r} 2 \\ + 9 \\ \hline 11 \end{array} & \begin{array}{r} 2 \\ + 5 \\ \hline 7 \end{array} & \begin{array}{r} 12 \\ - 3 \\ \hline 9 \end{array} & \begin{array}{r} 16 \\ - 6 \\ \hline 10 \end{array} & \begin{array}{r} 13 \\ - 9 \\ \hline 4 \end{array} & \begin{array}{r} 5 \\ + 8 \\ \hline 13 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 9 \\ + 4 \\ \hline 13 \end{array} & \begin{array}{r} 1 \\ + 10 \\ \hline 11 \end{array} & \begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array} & \begin{array}{r} 9 \\ + 4 \\ \hline 13 \end{array} & \begin{array}{r} 10 \\ - 8 \\ \hline 2 \end{array} & \begin{array}{r} 1 \\ + 9 \\ \hline 10 \end{array} & \begin{array}{r} 16 \\ - 9 \\ \hline 7 \end{array} & \begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array} & \begin{array}{r} 10 \\ - 9 \\ \hline 1 \end{array} & \begin{array}{r} 5 \\ + 10 \\ \hline 15 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 13 \\ - 12 \\ \hline 1 \end{array} & \begin{array}{r} 12 \\ + 4 \\ \hline 16 \end{array} & \begin{array}{r} 17 \\ - 8 \\ \hline 9 \end{array} & \begin{array}{r} 9 \\ - 8 \\ \hline 1 \end{array} & \begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array} & \begin{array}{r} 2 \\ + 10 \\ \hline 12 \end{array} & \begin{array}{r} 12 \\ - 9 \\ \hline 3 \end{array} & \begin{array}{r} 16 \\ - 4 \\ \hline 12 \end{array} & \begin{array}{r} 22 \\ - 10 \\ \hline 12 \end{array} & \begin{array}{r} 8 \\ + 7 \\ \hline 15 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 17 \\ - 5 \\ \hline 12 \end{array} & \begin{array}{r} 3 \\ + 11 \\ \hline 14 \end{array} & \begin{array}{r} 16 \\ - 5 \\ \hline 11 \end{array} & \begin{array}{r} 14 \\ - 2 \\ \hline 12 \end{array} & \begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array} & \begin{array}{r} 8 \\ + 12 \\ \hline 20 \end{array} & \begin{array}{r} 12 \\ - 11 \\ \hline 1 \end{array} & \begin{array}{r} 17 \\ - 10 \\ \hline 7 \end{array} & \begin{array}{r} 10 \\ + 12 \\ \hline 22 \end{array} & \begin{array}{r} 20 \\ - 11 \\ \hline 9 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 8 \\ - 5 \\ \hline 3 \end{array} & \begin{array}{r} 2 \\ - 1 \\ \hline 1 \end{array} & \begin{array}{r} 8 \\ - 6 \\ \hline 2 \end{array} & \begin{array}{r} 12 \\ - 11 \\ \hline 1 \end{array} & \begin{array}{r} 5 \\ + 7 \\ \hline 12 \end{array} & \begin{array}{r} 8 \\ + 10 \\ \hline 18 \end{array} & \begin{array}{r} 8 \\ + 6 \\ \hline 14 \end{array} & \begin{array}{r} 3 \\ + 6 \\ \hline 9 \end{array} & \begin{array}{r} 4 \\ + 4 \\ \hline 8 \end{array} & \begin{array}{r} 13 \\ - 8 \\ \hline 5 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 2 \\ - 1 \\ \hline 1 \end{array} & \begin{array}{r} 3 \\ + 7 \\ \hline 10 \end{array} & \begin{array}{r} 1 \\ + 11 \\ \hline 12 \end{array} & \begin{array}{r} 13 \\ - 4 \\ \hline 9 \end{array} & \begin{array}{r} 15 \\ - 8 \\ \hline 7 \end{array} & \begin{array}{r} 2 \\ + 3 \\ \hline 5 \end{array} & \begin{array}{r} 3 \\ + 2 \\ \hline 5 \end{array} & \begin{array}{r} 20 \\ - 12 \\ \hline 8 \end{array} & \begin{array}{r} 7 \\ + 4 \\ \hline 11 \end{array} & \begin{array}{r} 1 \\ + 5 \\ \hline 6 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 8 \\ - 6 \\ \hline 2 \end{array} & \begin{array}{r} 2 \\ + 1 \\ \hline 3 \end{array} & \begin{array}{r} 1 \\ + 4 \\ \hline 5 \end{array} & \begin{array}{r} 5 \\ + 5 \\ \hline 10 \end{array} & \begin{array}{r} 1 \\ + 4 \\ \hline 5 \end{array} & \begin{array}{r} 13 \\ - 2 \\ \hline 11 \end{array} & \begin{array}{r} 21 \\ - 10 \\ \hline 11 \end{array} & \begin{array}{r} 11 \\ + 8 \\ \hline 19 \end{array} & \begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array} & \begin{array}{r} 8 \\ - 1 \\ \hline 7 \end{array} \\
 \end{array}$$
  

$$\begin{array}{r}
 \begin{array}{r} 5 \\ + 9 \\ \hline 14 \end{array} & \begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array} & \begin{array}{r} 2 \\ + 4 \\ \hline 6 \end{array} & \begin{array}{r} 12 \\ - 6 \\ \hline 6 \end{array} & \begin{array}{r} 10 \\ + 5 \\ \hline 15 \end{array} & \begin{array}{r} 16 \\ - 5 \\ \hline 11 \end{array} & \begin{array}{r} 12 \\ - 11 \\ \hline 1 \end{array} & \begin{array}{r} 8 \\ + 4 \\ \hline 12 \end{array} & \begin{array}{r} 18 \\ - 11 \\ \hline 7 \end{array} & \begin{array}{r} 1 \\ + 12 \\ \hline 13 \end{array} \\
 \end{array}$$