

**Exercice 1 [2 points]** Écrire sans parenthèses :

$$A = +(-7) =$$

$$B = +( +3) =$$

$$C = -(-5) =$$

$$D = -( +2) =$$

**Exercice 2 [3 points]** Calculer :

$$E = -3 - 14 =$$

$$F = -5 + 2 =$$

$$G = -6 + 10 =$$

$$H = 7 - 18 =$$

$$I = 23 - 19 =$$

$$J = 0 - 7 =$$

**Exercice 3 [6 points]** Calculer :

$$K = -\frac{3}{7} + \frac{5}{7} =$$

$$L = -\frac{5}{13} - \frac{2}{13} =$$

$$M = \frac{7}{5} - \frac{29}{10} =$$

$$N = \frac{17}{12} - \frac{1}{3} =$$

**Exercice 4 [3 point]**      Calculer :

$$P = (-4,5) \times (-6) =$$

$$Q = (-7,2) \times (+4) =$$

$$R = (-2) \times (+3) \times (-4) =$$

**Exercice 5 [6 points]**      Écrire le résultat sous forme de fraction irréductible ou, le cas échéant, sous forme de nombre entier :

$$S = \left(1 - \frac{8}{5}\right) \times \left(-\frac{2}{3}\right) =$$

$$U = -\frac{3}{4} \times \frac{2}{5} - \frac{2}{5} =$$

$$V = \frac{1 - \frac{7}{2}}{1 - \frac{3}{2}} =$$

$$T = -\frac{5}{6} + \frac{1}{2} \times \frac{7}{3} =$$

## Corrigé

### Exercice 1

$$A = +(-7) = -7$$

$$B = +(+3) = +3 = 3$$

$$C = -(-5) = +5 = 5$$

$$D = -(+2) = -2$$

### Exercice 2

$$E = -3 - 14 = -17$$

$$F = -5 + 2 = -3$$

$$G = -6 + 10 = +4 = 4$$

$$H = 7 - 18 = -11$$

$$I = 23 - 19 = +4 = 4$$

$$J = 0 - 7 = -7$$

### Exercice 3

$$K = -\frac{3}{7} + \frac{5}{7} = \frac{-3}{7} + \frac{5}{7} = \frac{-3+5}{7} = \frac{+2}{7} = \frac{2}{7}$$

$$L = -\frac{5}{13} - \frac{2}{13} = \frac{-5}{13} - \frac{2}{13} = \frac{-5-2}{13} = \frac{-7}{13} = -\frac{7}{13}$$

$$\begin{aligned} M &= \frac{7}{5} - \frac{29}{10} = \frac{7 \times 2}{5 \times 2} - \frac{29}{10} = \frac{14}{10} - \frac{29}{10} = \frac{14-29}{10} = \frac{-15}{10} \\ &= -\frac{15}{10} = -\frac{3}{2} \end{aligned}$$

$$N = \frac{17}{12} - \frac{1}{3} = \frac{17}{12} - \frac{1 \times 4}{3 \times 4} = \frac{17}{12} - \frac{4}{12} = \frac{17-4}{12} = \frac{13}{12}$$

### Exercice 4

$$P = (-4,5) \times (-6) = +4,5 \times 6 = 27$$

$$Q = (-7,2) \times (+4) = -7,2 \times 4 = -28,8$$

$$R = (-2) \times (+3) \times (-4) = (-6) \times (-4) = +24 = 24$$

### Exercice 5

$$\begin{aligned} S &= \left(1 - \frac{8}{5}\right) \times \left(-\frac{2}{3}\right) = \left(\frac{5}{5} - \frac{8}{5}\right) \times \left(-\frac{2}{3}\right) = \left(\frac{5-8}{5}\right) \times \left(-\frac{2}{3}\right) \\ &= \left(-\frac{3}{5}\right) \times \left(-\frac{2}{3}\right) = \frac{(-3) \times (-2)}{5 \times 3} = \frac{+3 \times 2}{5 \times 3} = \frac{2}{5} \end{aligned}$$

$$\begin{aligned} T &= -\frac{5}{6} + \frac{1}{2} \times \frac{7}{3} = \frac{-5}{6} + \frac{1 \times 7}{2 \times 3} = \frac{-5}{6} + \frac{7}{6} = \frac{-5+7}{6} = \frac{2}{6} \\ &= \frac{2 \times 1}{2 \times 3} = \frac{1}{3} \end{aligned}$$

$$\begin{aligned} U &= -\frac{3}{4} \times \frac{2}{5} - \frac{2}{5} = \frac{-3}{4} \times \frac{2}{5} - \frac{2}{5} = \frac{(-3) \times 2}{4 \times 5} - \frac{2}{5} \\ &= \frac{-3 \times 2}{2 \times 2 \times 5} - \frac{2}{2 \times 5} = \frac{-3}{10} - \frac{4}{10} = \frac{-3-4}{10} = \frac{-7}{10} = -\frac{7}{10} \end{aligned}$$

$$\begin{aligned} V &= \frac{1 - \frac{7}{2}}{1 - \frac{3}{2}} = \frac{\frac{2}{2} - \frac{7}{2}}{\frac{2}{2} - \frac{3}{2}} = \frac{\frac{2-7}{2}}{\frac{2-3}{2}} = \frac{-5}{2} = \frac{-5}{2} = +\frac{5}{2} \times \frac{2}{1} = \frac{5 \times 2}{2 \times 1} \\ &= \frac{5}{1} = 5 \end{aligned}$$