

1 Calcule et écris le résultat sous la forme d'une fraction, la plus simple possible.

$$A = \left(\frac{3}{4}\right)^2$$

$$A = \frac{3}{4} \times \frac{3}{4} = \frac{9}{16}$$

$$B = \frac{1 - 5^2}{(1 - 5)^2}$$

$$B = \frac{1 - 25}{(-4)^2}$$

$$B = \frac{-24}{16} = -\frac{3}{2}$$

$$C = \frac{5^2}{3}$$

$$C = \frac{25}{3}$$

$$D = \frac{(-5)^2}{(-2)^3}$$

$$D = \frac{(-5) \times (-5)}{(-2) \times (-2) \times (-2)}$$

$$D = -\frac{25}{8}$$

2 Pour chaque calcul, entoure le signe de l'opération que l'on doit effectuer en premier.

$$E = \frac{8}{5} + \frac{7}{5} \otimes \frac{4}{5}$$

$$F = \frac{53}{30} - \left(\frac{3}{10} \oplus \frac{9}{10}\right)$$

$$G = \frac{7}{6} \otimes \frac{7}{2} - \frac{3}{2}$$

$$H = \frac{3}{7} + \left(\frac{17}{14} \ominus \frac{23}{28}\right)$$

$$J = \left(\frac{8}{5} \oplus \frac{7}{5}\right) \times \frac{4}{5}$$

$$K = \frac{53}{30} \ominus \frac{3}{10} + \frac{9}{10}$$

$$L = \frac{7}{6} \times \left(\frac{7}{2} \ominus \frac{3}{2}\right)$$

$$M = \frac{3}{7} \oplus \frac{17}{14} - \frac{23}{28}$$

3 En respectant les priorités opératoires, calcule les expressions suivantes.

$$N = \frac{8}{5} + \frac{7}{5} \times \frac{4}{5}$$

$$N = \frac{8}{5} + \frac{28}{25}$$

$$N = \frac{40}{25} + \frac{28}{25}$$

$$N = \frac{68}{25}$$

$$P = \frac{53}{30} - \left(\frac{3}{10} + \frac{9}{10}\right)$$

$$P = \frac{53}{30} - \frac{12}{10}$$

$$P = \frac{53}{30} - \frac{36}{30}$$

$$P = \frac{17}{30}$$

$$Q = \frac{7}{6} \times \frac{7}{2} - \frac{3}{2}$$

$$Q = \frac{49}{12} - \frac{3}{2}$$

$$Q = \frac{49}{12} - \frac{18}{12}$$

$$Q = \frac{31}{12}$$

$$R = \frac{3}{7} + \left(\frac{17}{14} - \frac{23}{28}\right)$$

$$R = \frac{3}{7} + \left(\frac{34}{28} - \frac{23}{28}\right)$$

$$R = \frac{3}{7} + \frac{11}{28}$$

$$R = \frac{12}{28} + \frac{11}{28} = \frac{23}{28}$$

$$S = \left(\frac{8}{5} + \frac{7}{5}\right) \times \frac{4}{5}$$

$$S = \frac{15}{5} \times \frac{4}{5}$$

$$S = \frac{60}{25}$$

$$S = \frac{12}{5}$$

$$T = \frac{53}{30} - \frac{3}{10} + \frac{9}{10}$$

$$T = \frac{53}{30} - \frac{9}{30} + \frac{27}{30}$$

$$T = \frac{44}{30} + \frac{27}{30}$$

$$T = \frac{71}{30}$$

$$U = \frac{7}{6} \times \left(\frac{7}{2} - \frac{3}{2}\right)$$

$$U = \frac{7}{6} \times \frac{4}{2}$$

$$U = \frac{7}{6} \times 2$$

$$U = \frac{14}{6} = \frac{7}{3}$$

$$V = \frac{3}{7} + \frac{17}{14} - \frac{23}{28}$$

$$V = \frac{12}{28} + \frac{34}{28} - \frac{23}{28}$$

$$V = \frac{46}{28} - \frac{23}{28}$$

$$V = \frac{23}{28}$$

4 Calcule en respectant les priorités opératoires.

$$W = \left(\frac{1}{2} - \frac{3}{4}\right) \times \frac{16}{9}$$

$$W = \left(\frac{2}{4} - \frac{3}{4}\right) \times \frac{16}{9}$$

$$W = \left(-\frac{1}{4}\right) \times \frac{16}{9}$$

$$W = -\frac{1 \times 4 \times 4}{4 \times 9}$$

$$W = -\frac{4}{9}$$

$$X = \frac{1}{2} - \frac{3}{4} \times \frac{16}{9}$$

$$X = \frac{1}{2} - \frac{3 \times 4 \times 4}{4 \times 3 \times 3}$$

$$X = \frac{1}{2} - \frac{4}{3}$$

$$X = \frac{3}{6} - \frac{8}{6}$$

$$X = -\frac{5}{6}$$

$$Y = \frac{1}{5} - \frac{3}{10} \times \frac{1}{6} + \frac{1}{2}$$

$$Y = \frac{1}{5} - \frac{3 \times 1}{10 \times 3 \times 2} + \frac{1}{2}$$

$$Y = \frac{1}{5} - \frac{1}{20} + \frac{1}{2}$$

$$Y = \frac{4}{20} - \frac{1}{20} + \frac{10}{20}$$

$$Y = \frac{13}{20}$$

$$Z = \left(\frac{1}{5} - \frac{3}{10}\right) \times \left(\frac{1}{6} + \frac{1}{2}\right)$$

$$Z = \left(\frac{2}{10} - \frac{3}{10}\right) \times \left(\frac{1}{6} + \frac{3}{6}\right)$$

$$Z = -\frac{1}{10} \times \frac{4}{6}$$

$$Z = -\frac{1 \times 2 \times 2}{5 \times 2 \times 2 \times 3}$$

$$Z = -\frac{1}{15}$$