

Chaînes d'opérations

$$a) \frac{5}{6} \div 2\frac{7}{9} \div 1\frac{2}{3} \times 8$$

$$= \frac{5}{6} \div \frac{25}{9} \div \frac{5}{3} \times 8$$

$$= \frac{\cancel{5}^1}{\cancel{6}_2} \times \frac{\cancel{9}^3}{\cancel{25}_5} \times \frac{3}{5} \times \frac{8}{1}$$

$$= \frac{36}{25}$$

$$b) 2 \times \frac{5}{6} - 75\% \div \frac{3}{8} + \left(1\frac{1}{2}\right)^3$$

$$= 2 \times \frac{5}{6} - \frac{75}{100} \div \frac{3}{8} + \left(\frac{3}{2}\right)^3$$

$$= \frac{\cancel{2}^1}{\cancel{1}} \times \frac{5}{\cancel{6}_3} - \frac{\cancel{75}^{25}}{\cancel{100}^{25}} \times \frac{8}{\cancel{3}} + \frac{3}{2} \times \frac{3}{2} \times \frac{3}{2}$$

$$= \frac{5}{3} - \frac{2}{1} + \frac{27}{8}$$

$$= \frac{40}{24} - \frac{48}{24} + \frac{81}{24} = \frac{73}{24}$$

$$c) \left(1\frac{1}{5}\right)^{-2} - \left(\frac{-2}{3}\right)^2 - \frac{15}{16} \div 1\frac{1}{4}$$

$$= \left(\frac{6}{5}\right)^{-2} - \frac{-2}{3} \times \frac{-2}{3} - \frac{15}{16} \div \frac{5}{4}$$

$$= \left(\frac{5}{6}\right)^2 - \frac{4}{9} - \frac{\cancel{15}^3}{\cancel{16}_4} \times \frac{\cancel{4}^1}{\cancel{5}} \div \frac{1}{1}$$

$$= \frac{5}{6} \times \frac{5}{6} - \frac{4}{9} - \frac{3}{4}$$

$$= \frac{25}{36} - \frac{4}{9} - \frac{3}{4}$$

$$= \frac{25}{36} - \frac{16}{36} - \frac{27}{36} = \frac{-18}{36} = -\frac{1}{2}$$