

Fractions et calcul littéral

3e, 2nde

Exercice 1 : Calculer

$$A = \frac{1}{2}x + \frac{x}{3}$$

$$C = \frac{6}{7x} - \frac{7}{4}x$$

$$E = -\frac{9}{8}x + \frac{6x}{7}$$

$$B = \frac{2x}{5} + \frac{3x}{4}$$

$$D = -\frac{7}{6x} - \frac{8}{5x}$$

$$F = -\frac{10}{3}x - \frac{5}{6x^2}$$

Exercice 2 : Calculer

$$A = \frac{2}{3}x \times \frac{1}{4}$$

$$C = \left(-\frac{12}{5}x\right) \times \frac{10x}{3}$$

$$E = \frac{16x}{21} \times \left(-\frac{7}{4}x\right) \times \left(\frac{9x}{12}\right)$$

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

$$D = \left(-\frac{15}{4}x^2\right) \times \frac{8}{3} \times \left(-\frac{2}{5x}\right)$$

$$F = -\frac{9}{4}x^2 \times \frac{1}{3x} \times \frac{8x^3}{15}$$

Exercice 3 : Calculer

$$A = \frac{\frac{4}{3}x}{\frac{1}{2}}$$

$$B = \frac{\frac{9}{5}}{\frac{3}{10}x}$$

$$C = \frac{-\frac{8}{7x}}{\frac{2}{21}}$$

$$D = \frac{-\frac{16}{5}}{-\frac{4}{3x}}$$

Exercice 4 : Résoudre les équations suivantes

$$\frac{1}{2}x + 3 = 5$$

$$\frac{1}{5}(2x - 3) + x = -\frac{2x}{3} - \frac{1}{4}$$

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

$$\frac{-x+4}{3} - \frac{2x+3}{4} = \frac{5}{6}$$