

Correction devoir 2

Exercice 1

$$A = \frac{3}{4} \times \frac{2}{3} = \frac{\cancel{3}}{2 \times \cancel{2}} \times \frac{\cancel{2}}{\cancel{3}} = \frac{1}{2} \quad ; \quad B = \frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$$

$$C = \frac{1}{4} - \frac{1}{3} = \frac{3}{12} - \frac{4}{12} = -\frac{1}{12} \quad ; \quad D = \frac{2}{5} \div \frac{3}{10} = \frac{2}{5} \times \frac{10}{3} = \frac{\cancel{2}}{\cancel{5}} \times \frac{\cancel{2} \times 2}{3} = \frac{4}{3}$$

Exercice 2

$$E = 2(5x - 3) - 3(3x - 4) = 10x - 6 - 9x + 12 = x + 6.$$

Exercice 3

1. $f(-1) = 3 \times (-1) + 4 = -3 + 4 = 1.$
2. $g(-3) = (-3)^2 - 2 \times (-3) + 1 = 9 + 6 + 1 = 16.$

Exercice 4

1. $x + 3 = 5$
 $\Leftrightarrow x = 5 - 3 = 2$
2. $3x - 4 = 7$
 $\Leftrightarrow 3x = 7 + 4 = 11$
 $\Leftrightarrow x = \frac{11}{3}$
3. $6x + 5 = 4x + 9$
 $\Leftrightarrow 6x - 4x = 9 - 5$
 $\Leftrightarrow 2x = 4$
 $\Leftrightarrow x = \frac{4}{2} = 2$