

SUJET DE LA SEANCE 1 (CALCUL LITTERAL) : CORRIGE

Exercice 1

$$\begin{aligned} \frac{7}{a} &= \frac{2}{5} \Leftrightarrow 2a = 7 \times 5 \\ &\Leftrightarrow 2a = 35 \\ &\Leftrightarrow a = \frac{35}{2} \end{aligned}$$

Exercice 2

$$\begin{aligned} a^{-4} \times b^{-4} &= (a \times b)^{-4} \\ a^{-6} \times a^2 &= a^{-6+2} = a^{-4} \\ (a^{-2})^{-3} &= a^{-2 \times (-3)} = a^6 \\ \frac{a^{-3}}{a} &= a^{-3-1} = a^{-4} \end{aligned}$$

Exercice 3

- a) $5x(x+3) - 4x(x-2) = 5x^2 + 15x - 4x^2 + 8x$
 $5x(x+3) - 4x(x-2) = x^2 + 23x.$
- b) $(2x-5)(3x+1) = 6x^2 - 13x - 5.$
- c) $(x+7)^2 = x^2 + 14x + 49.$