



CORRECTIONS

Corrigés Savoir N. 1

Corrigé Exercice 1

$A = -3$	$B = -8$	$C = +9$	$D = -14$	$E = +4$
$F = -7$	$G = -27$	$H = +18$	$I = +1$	$J = 0$
$K = +25$	$L = +42$	$M = -5$	$N = -1$	$P = -49$

Corrigé Exercice 2

1) $Z = 49$ $Y = 25$ $X = 1$ $W = -121$ $V = 0$

2)

Forme puissance	2^4	4^5	$(-7)^3$	$(-5)^0$
Forme produit	$2 \times 2 \times 2 \times 2$	$4 \times 4 \times 4 \times 4 \times 4$	$(-7) \times (-7) \times (-7)$	1

3) $U = 32$ $T = +1$ $S = -64$ $R = -81$ $P = -1$

Corrigé Exercice 3

$A = +3$	$B = -4$	$C = -13$	$D = +4$	$E = 2$	$F = -2$
$G = -1 + 9$	$H = 7 - 11$	$I = -5 - 10$	$J = -21 + 2$	$K = -12 - 1$	$L = 7 - 3 + 7$
$G = +8$	$H = -4$	$I = -15$	$J = -19$	$K = -13$	$L = 11$

Corrigé Exercice 4

1) $A_1 = 5 - (2 + 7)$	$A_2 = 4 \times (5 - 2)$	$A_3 = 4 - 5 \times 6$	$A_4 = 8 - (11 - 14)$
$A_1 = 5 - 9$	$A_2 = 4 \times 3$	$A_3 = 4 - 30$	$A_4 = 8 - (-3)$
$A_1 = -4$	$A_2 = 12$	$A_3 = -26$	$A_4 = 8 + 3 = 11$
$A_5 = 5 - 16 \times 2 - 2$	$A_6 = 5 \times 7 - 4 \times 9$	$A_7 = (12 - 4) \times (-3)$	$A_8 = 5 \times (9 - 3 \times (-4))$
$A_5 = 5 - 32 - 2$	$A_6 = 35 - 4 \times 9$	$A_7 = 8 \times (-3)$	$A_8 = 5 \times (9 + 12)$
$A_5 = 5 - 34$ (ou $-27 - 2$)	$A_6 = 35 - 36$	$A_7 = -24$	$A_8 = 5 \times 21$
$A_5 = -29$	$A_6 = -1$		$A_8 = 105$
$A_9 = \frac{10 - 4}{3 \times 2} = \frac{6}{6} = 1$	$A_{10} = 5 \times \frac{7 - 1}{3}$	$A_{11} = (4 - 16) \div (-3)$	$A_{12} = \frac{3 - 2 \times 6}{(-3)^2}$
	$A_{10} = 5 \times \frac{6}{3}$	$A_{11} = (-12) \div (-3)$	$A_{12} = \frac{3 - 12}{9} = \frac{-9}{9}$
	$A_{10} = 5 \times 2 = 10$	$A_{11} = 4$	$A_{12} = -1$

Corrigé Exercice 4 (suite)

$$\begin{aligned} 2) \quad B_1 &= 2 \times \underline{6^2} \\ B_1 &= 2 \times \underline{36} \\ B_1 &= \underline{72} \end{aligned}$$

$$\begin{aligned} B_2 &= (\underline{2 \times 6})^2 \\ B_2 &= (12)^2 \\ B_2 &= \underline{144} \end{aligned}$$

$$\begin{aligned} B_3 &= 4 \times \underline{(-3)^2} \\ B_3 &= 4 \times \underline{9} \\ B_3 &= \underline{36} \end{aligned}$$

$$\begin{aligned} B_4 &= (\underline{4 \times (-3)})^2 \\ B_4 &= \underline{(-12)}^2 \\ B_4 &= \underline{+144} \end{aligned}$$

$$\begin{aligned} B_5 &= 5 + \underline{2^2} \\ B_5 &= 5 + \underline{4} \\ B_5 &= \underline{9} \end{aligned}$$

$$\begin{aligned} B_6 &= (\underline{5+2})^2 \\ B_6 &= (\underline{7})^2 \\ B_6 &= \underline{49} \end{aligned}$$

$$\begin{aligned} B_7 &= (\underline{-2+7})^2 \\ B_7 &= (\underline{5})^2 \\ B_7 &= \underline{25} \end{aligned}$$

$$\begin{aligned} B_9 &= 2 \times \underline{(-5)^2} - 15 \\ B_9 &= \underline{2 \times 25} - 15 \\ B_9 &= 50 - 15 = \underline{35} \end{aligned}$$

$$\begin{aligned} 3) \quad P_1 &= (\underline{2 \times 3})^4 \\ P_1 &= \underline{6^4} \\ P_1 &= \underline{1\ 296} \end{aligned}$$

$$\begin{aligned} P_2 &= 5 \times \underline{2^3} \\ P_2 &= 5 \times \underline{8} \\ P_2 &= \underline{40} \end{aligned}$$

$$\begin{aligned} P_3 &= 1 + \underline{(-1)^7} \\ P_3 &= 1 - 1 \\ P_3 &= \underline{0} \end{aligned}$$

$$\begin{aligned} P_4 &= (\underline{3-4})^{12} \\ P_4 &= \underline{(-1)}^{12} \\ P_4 &= \underline{+1} \end{aligned}$$

$$\begin{aligned} P_5 &= (\underline{4+1})^5 \\ P_5 &= (\underline{5})^5 \\ P_5 &= \underline{3\ 125} \end{aligned}$$

$$\begin{aligned} P_6 &= 4 - \underline{1^6} \\ P_6 &= 4 - 1 \\ P_6 &= \underline{3} \end{aligned}$$

$$\begin{aligned} P_7 &= 2 \times \underline{(-1)^3} + 4^1 \\ P_7 &= \underline{2 \times (-1)} + 4 \\ P_7 &= \underline{-2} + 4 \\ P_7 &= \underline{2} \end{aligned}$$

$$\begin{aligned} P_8 &= (\underline{3 \times (-2)})^3 \\ P_8 &= \underline{(-6)}^3 \\ P_8 &= \underline{-216} \end{aligned}$$

Corrigé Exercice 5

1^{er} entraînement :

$$\begin{aligned} C_1 &= -7 + 3 \\ C_1 &= \underline{-4} \end{aligned}$$

$$\begin{aligned} C_2 &= -8 + 2 \times 5 \\ C_2 &= -8 + 10 \\ C_2 &= \underline{2} \end{aligned}$$

$$\begin{aligned} C_3 &= (3 \times 5 - 5) \times (7 \times 2 - 4) \\ C_3 &= (15 - 5) \times (14 - 4) \\ C_3 &= \underline{10} \times \underline{10} \\ C_3 &= \underline{100} \end{aligned}$$

$$\begin{aligned} C_4 &= 15 \div 5 + 5 \times 7 - 7 \\ C_4 &= \underline{3} + \underline{35} - 7 \\ C_4 &= \underline{38} - 7 \\ C_4 &= \underline{31} \end{aligned}$$

$$\begin{aligned} C_5 &= (5 - 9)^2 - (4 - 5) \times (10 - 2) \\ C_5 &= \underline{(-4)^2} - \underline{(-1) \times (8)} \\ C_5 &= \underline{16} - \underline{(-8)} \\ C_5 &= \underline{16} + \underline{8} \\ C_5 &= \underline{24} \end{aligned}$$

$$\begin{aligned} C_6 &= \frac{3 \times 2 - 16}{8 - 3} \\ C_6 &= \frac{6 - 16}{5} \\ C_6 &= \frac{-10}{5} \\ C_6 &= \underline{-2} \end{aligned}$$

2^{ème} entraînement :

$$\begin{aligned} D_1 &= -8 + 2 \\ D_1 &= \underline{-6} \end{aligned}$$

$$\begin{aligned} D_2 &= 5 \times (-7) - 12 \\ D_2 &= \underline{-35} - 12 \\ D_2 &= \underline{-47} \end{aligned}$$

$$\begin{aligned} D_3 &= 4 - 3 \times (12 - 2 \times 8) \\ D_3 &= 4 - 3 \times (12 - 16) \\ D_3 &= 4 - 3 \times \underline{(-4)} \\ D_3 &= \underline{4} + \underline{12} \\ D_3 &= \underline{16} \end{aligned}$$

$$\begin{aligned} D_4 &= 5 \times (-3)^2 + 4 \times (-3) + 7 \\ D_4 &= 5 \times \underline{9} - \underline{12} + 7 \\ D_4 &= \underline{45} - \underline{5} \\ D_4 &= \underline{40} \end{aligned}$$

$$\begin{aligned} D_5 &= 2 \times (6 + 5) - (2 - 5)^2 \\ D_5 &= 2 \times \underline{11} - \underline{(-3)^2} \\ D_5 &= \underline{22} - \underline{(-3) \times (-3)} \\ D_5 &= \underline{22} - \underline{9} \\ D_5 &= \underline{13} \end{aligned}$$

$$\begin{aligned} D_6 &= \frac{16}{8} - \frac{6}{3} \\ D_6 &= \underline{2} - \underline{2} \\ D_6 &= \underline{0} \end{aligned}$$