

CORRECTIONS



Corrections Savoir Op. 1

Corrigé Exercice 1

A = -3	B = -8	C = +9	D = -14	E = +4
F = -7	G = -27	H = +18	I = +16	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) $A_1 = 5 - (2 + 7)$ $A_1 = 5 - 9$ $A_1 = -4$	$A_2 = 4 \times (5 - 2)$ $A_2 = 4 \times 3$ $A_2 = 12$	$A_3 = 4 - \underline{5 \times 6}$ $A_3 = 4 - 30$ $A_3 = -26$	$A_4 = 8 - (11 - 14)$ $A_4 = 8 - (-3)$ $A_4 = 8 + 3 = 11$
$A_5 = 5 - \underline{16 \times 2} - 2$ $A_5 = 5 - 32 - 2$ $A_5 = 5 - 34$ (ou $-27 - 2$) $A_5 = -29$	$A_6 = \underline{5 \times 7} - 4 \times 9$ $A_6 = 35 - 4 \times 9$ $A_6 = 35 - 36$ $A_6 = -1$	$A_7 = (12 - 4) \times (-3)$ $A_7 = 8 \times (-3)$ $A_7 = -24$	$A_8 = 5 \times (9 - 3 \times (-4))$ $A_8 = 5 \times (9 + 12)$ $A_8 = 5 \times 21$ $A_8 = 105$
$A_9 = \frac{10 - 4}{3 \times 2} = \frac{6}{6} = 1$	$A_{10} = 5 \times \frac{7 - 1}{3}$ $A_{10} = 5 \times \frac{6}{3}$ $A_{10} = 5 \times 2 = 10$	$A_{11} = (4 - 16) \div (-3)$ $A_{11} = (-12) \div (-3)$ $A_{11} = 4$	$A_{12} = \frac{3 - 2 \times 6}{(-3)^2}$ $A_{12} = \frac{3 - 12}{9} = \frac{-9}{9}$ $A_{12} = -1$

Corrigé Exercice 4 (suite)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Corrigé Exercice 5

1^{er} entraînement :

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

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

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

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

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

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

2^{ème} entraînement :

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

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

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

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

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

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