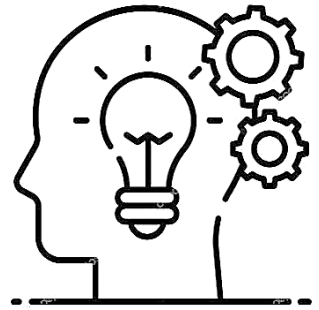


## A.2 Corrections



### Corrigé Exercice 5

| 1)       | $3 + x$                                  | $x - 10$                           | $-5 + x$                                     | $-4 - x$                                     | $6 - x$                                  | $3 - x - 1$                                          | $-7 - x + 4$                                            |
|----------|------------------------------------------|------------------------------------|----------------------------------------------|----------------------------------------------|------------------------------------------|------------------------------------------------------|---------------------------------------------------------|
| $x = 4$  | $3 + 4 = 7$                              | $4 - 10 = -6$                      | $-5 + 4 = -1$                                | $-4 - 4 = -8$                                | $6 - 4 = 2$                              | $3 - 4 - 1 = -2$                                     | $-7 - 4 + 4 = -7$                                       |
| $x = -3$ | $3 + x =$<br>$3 + (-3) =$<br>$3 - 3 = 0$ | $x - 10 =$<br>$-3 - 10 =$<br>$-13$ | $-5 + x =$<br>$-5 + (-3) =$<br>$-5 - 3 = -8$ | $-4 - x =$<br>$-4 - (-3) =$<br>$-4 + 3 = -1$ | $6 - x =$<br>$6 - (-3) =$<br>$6 + 3 = 9$ | $3 - x - 1 =$<br>$3 - (-3) - 1 =$<br>$3 + 3 - 1 = 5$ | $-7 - x + 4 =$<br>$-7 - (-3) + 4 =$<br>$-7 + 3 + 4 = 0$ |

| 2)       | $5 \times x$          | $-2 \times x$         | $6x$                                     | $-3x$                                        | $x \div (-2)$       | $\frac{x}{4}$       | $x^2$          |
|----------|-----------------------|-----------------------|------------------------------------------|----------------------------------------------|---------------------|---------------------|----------------|
| $x = 8$  | $5 \times 8 = 40$     | $-2 \times 8 = -16$   | $6x = 6 \times x =$<br>$6 \times 8 = 48$ | $-3x = -3 \times x =$<br>$-3 \times 8 = -24$ | $8 \div (-2) = -4$  | $\frac{8}{4} = 2$   | $8^2 = 64$     |
| $x = -4$ | $5 \times (-4) = -20$ | $-2 \times (-4) = +8$ | $6 \times (-4) = -24$                    | $-3 \times (-4) = +12$                       | $-4 \div (-2) = +2$ | $\frac{-4}{4} = -1$ | $(-4)^2 = +16$ |

### Corrigé Exercice 6

|                                                                                                                             |                                                                                                                    |                                                                                                                                                            |                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| a)<br>$A = 3x + 2$ et $x = 5$<br>$A = 3 \times 5 + 2$<br>$A = 15 + 2 = 17$                                                  | b)<br>$B = 2x - 5$ et $x = -3$<br>$B = 2 \times (-3) - 5$<br>$B = -6 - 5 = -11$                                    | c)<br>$C = 4 - 6x$ et $x = 2$<br>$C = 4 - 6 \times 2$<br>$C = 4 - 12 = -8$                                                                                 | d)<br>$D = -7 + 2x$ et $x = -6$<br>$D = -7 + 2 \times (-6)$<br>$D = -7 - 12 = -19$                                      |
| e)<br>$E = 3 \times (2 - x)$<br>et $x = -5$<br>$E = 3 \times (2 - (-5))$<br>$E = 3 \times (2 + 5)$<br>$E = 3 \times 7 = 21$ | f)<br>$F = (m + 4)(m - 10)$<br>et $m = -1$<br>$F = (-1 + 4) \times (-1 - 10)$<br>$F = 3 \times (-11)$<br>$F = -33$ | g)<br>$G = (2x - 1)(5 - 3x)$<br>et $x = 4$<br>$G = (2 \times 4 - 1) \times (5 - 3 \times 4)$<br>$G = (8 - 1) \times (5 - 12)$<br>$G = 7 \times (-7) = -49$ | h)<br>$H = -1 - (2 - 3u)$<br>Et $u = -3$<br>$H = -1 - (2 - 3 \times (-3))$<br>$H = -1 - (2 + 9)$<br>$H = -1 - 11 = -12$ |

### Corrigé Exercice 7

|                                                                                                                            |                                                                                                               |                                                                                                                                                                                |                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a)<br>$I = x^2$ et $x = -3$<br>$I = (-3)^2$<br>$I = +9$                                                                    | b)<br>$J = 3x^2$ et $x = 5$<br>$J = 3 \times 5^2$<br>$J = 3 \times 25$<br>$J = 75$                            | c)<br>$K = a^2 - 1$ et $a = -1$<br>$K = (-1)^2 - 1$<br>$K = 1 - 1$<br>$K = 0$                                                                                                  | d)<br>$L = (x - 5)^3$ et $x = 2$<br>$L = (2 - 5)^3$<br>$L = (-3)^3$<br>$L = -27$                                                                                    |
| e)<br>$M = 3(x^2 - 2)$ et $x = 1$<br>$M = 3 \times (1^2 - 2)$<br>$M = 3 \times (1 - 2)$<br>$M = 3 \times (-1)$<br>$M = -3$ | f)<br>$N = (3 - 4x)^2$ et $x = 2$<br>$N = (3 - 4 \times 2)^2$<br>$N = (3 - 8)^2$<br>$N = (-5)^2$<br>$N = +25$ | g)<br>$P = 6 - p^2 + 4p$<br>et $p = -6$<br>$P = 6 - (-6)^2 + 4 \times (-6)$<br>$P = 6 - 36 + 4 \times (-6)$<br>$P = 6 - 36 - 24$<br>$P = 6 - 60$ (ou $-30 - 24$ )<br>$P = -54$ | h)<br>$Q = x^3 - (6 + 3x)^2$<br>et $x = -4$<br>$Q = (-4)^3 - (6 + 3 \times (-4))^2$<br>$Q = -64 - (6 - 12)^2$<br>$Q = -64 - (-6)^2$<br>$Q = -64 - 36$<br>$Q = -100$ |