Correction DS 6

Exercice 1.

$4x - 10 = 2$

$+10$: $4x = 12$

$\div 4$: $x = 3$

$2x - 6 = 5x + 4$

$-5x$: $-3x - 6 = 4$

$+6$: $-3x = 10$

$\div -3$: $x = -\frac{10}{3}$

Exercice 2

1) $f(0) = -1$ 2) $f(2) = 0$

3) 1,5 et -1,5 4) -1 5) -2

Exercice 3.

1) $-7 + 5 = -2$

$(-2)^2 = 4$

$4 - 2 = 2$ on obtient 2.

2) $f(x) = (x+5)^2 - 2$.

Exercice 4.

$g(-2) = -3 \times (-2) + 5$

$= 6 + 5$

$= 11$

$g(5) = -3 \times 5 + 5$

$= -15 + 5$

$= -10$

$g(x) = 2$

$-3x + 5 = 2$

$-3x = -3$.

$x = 1$.

$g(x) = -15$

$-3x + 5 = -15$

$-3x = -20$

$x = \frac{20}{3}$.

Exercice 5

$V_{cône} = \frac{\pi \times R \times R \times h}{3}$

$= \frac{\pi \times 60 \times 60 \times 500}{3}$

$= 600\,000\ \pi\ cm^3$

$\simeq 1.884\,956\ cm^3$

$V_{miniature} = \left(\frac{1}{20}\right)^3 \times V_{cône}$

$= 75\pi\ cm^3$

$\simeq 235,62\ cm^3$.

$\simeq 235\,619,4\ mm^3$.