Correction de l'exercice 1 :

a) $4^5 = 4 \times 4 \times 4 \times 4 \times 4 = 1024$

b) $7^{-2} = \dfrac{1}{7^2} = \dfrac{1}{49} \simeq 0,0204$

c) $(-6)^3 = (-6) \times (-6) \times (-6) = -216$

d) $10^{-9} = \underbrace{0,0000000001}_{\text{9 zéros}}$

e) $-3^6 = -3 \times 3 \times 3 \times 3 \times 3 \times 3 = -729$

f) $(-8)^{-4} = \dfrac{1}{(-8)^4} = \dfrac{1}{(-8) \times (-8) \times (-8) \times (-8)} = \dfrac{1}{4096} \simeq 0,00024$

Correction de l'exercice 2 :

a) $10^6 = 1\underbrace{000\ 000}_{\text{6 zéros}}$

b) $(-11)^3 = (-11) \times (-11) \times (-11) = -1331$

c) $9^{-2} = \dfrac{1}{9^2} = \dfrac{1}{9 \times 9} = \dfrac{1}{81} \simeq 0,0123$

d) $(-12)^{-2} = \dfrac{1}{(-12)^2} = \dfrac{1}{(-12) \times (-12)} = \dfrac{1}{144} \simeq 0,00694$

e) $-2^{-5} = \dfrac{1}{-2^5} = \dfrac{1}{-2 \times 2 \times 2 \times 2 \times 2} = \dfrac{1}{-32} = -0,03125$

f) $1270^0 = 1$