

## Correction de la feuille n°6

- Exercice 1
- a)  $10^3 \times 10^3 = 10^{3+3} = 10^6$
  - b)  $10^3 \times 10^4 = 10^{3+4} = 10^7$
  - c)  $10^3 \times 10^5 = 10^{3+5} = 10^8$
  - d)  $10^5 \times 10^7 = 10^{5+7} = 10^{12}$
  - e)  $10^7 \times 10^7 = 10^{7+7} = 10^{14}$
  - f)  $10^7 \times 10 = 10^8 \times 10^{\boxed{2}} = 10^{8+2} = 10^9$

## Exercice 2

- a)  $\frac{10^7}{10^2} = 10^{7-2} = 10^5$
- b)  $\frac{10^9}{10^3} = 10^{9-3} = 10^6$
- c)  $\frac{10^{10}}{10^5} = 10^{10-5} = 10^5$
- d)  $\frac{10^6}{10^9} = 10^{6-9} = 10^{-3}$

## Exercice 3

- a)  $(10^3)^2 = 10^{3 \times 2} = 10^6$
- b)  $(10^4)^3 = 10^{4 \times 3} = 10^{12}$
- c)  $(10^2)^5 = 10^{2 \times 5} = 10^{10}$
- d)  $(10^1)^8 = 10^{1 \times 8} = 10^8$
- e)  $(10^{10})^{10} = 10^{10 \times 10} = 10^{100}$
- f)  $(10^5)^0 = 10^{5 \times 0} = 10^0$