

Exercice 3 feuille AP - Puissances 1

$$a) \frac{10^{-7}}{10^{-4}} = 10^{-7-(-4)} = 10^{-7+4} = 10^{-3}$$

$$b) \frac{10^{-13}}{10^{10}} = 10^{-13-10} = 10^{-23}$$

$$c) \frac{10^{12}}{10^{-9}} = 10^{12-(-9)} = 10^{12+9} = 10^{21}$$

$$d) \frac{10^{-6}}{10^{-7}} = 10^{-6-(-7)} = 10^{-6+7} = 10^{-1}$$

Exercice 5

$$a) (10^3)^2 = 10^3 \times 10^3 = 10^{3+3} = 10^6 = 10^{3 \times 2}$$

$$b) (10^{-3})^2 = 10^{(-3) \times 2} = 10^{-6}$$

$$c) (10^{-3})^{-2} = 10^{-3 \times (-2)} = 10^6$$

$$d) (10^7)^{-4} = 10^{7 \times (-4)} = 10^{-28}$$