# Exponents and logarithms

### Exponent is a simple way of writing repeated multiplication

### In an expression like , the 2 is called the **base** and the 5 is the **exponent** or **power**

### When we multiply two expressions with the same base, we add their exponents, and when we divide two expressions with the same base we subtract exponents:

### A negative exponent means the extra numbers are in the denominator:

### Any nonzero number raised to the zero power equals 1

### Zero raised to any negative power or null is undefined

### When an exponential expression is raised to a power, we multiply the exponent of the expression by the power to which the expression is raised: