



## Table of Greek letters

The use of Greek letters makes it possible to standardise the language of analysis. The use of Greek letters is a tribute to humanity's march towards knowledge. The letters we use today have been standardised so that scientific ideas can be translated into any language. Greek letters also make it possible to save on notation by simplifying it.

| $N^0$ | Lowercase  | Uppercase  | Meaning | Pronunciation | Common Usage  |
|-------|------------|------------|---------|---------------|---|
| 1     | $\alpha$   | A          | Alpha   | <i>a</i>      | Coefficients, angles  |
| 2     | $\beta$    | B          | Beta    | <i>b</i>      | Coefficients, angles, $\beta$ -particles in physics           |
| 3     | $\gamma$   | $\Gamma$   | Gamma   | <i>g</i>      | Relativity, gamma functions, $\gamma$ -rays in physics        |
| 4     | $\delta$   | $\Delta$   | Delta   | <i>d</i>      | Differences, variations, $\partial$ (partial derivative)      |
| 5     | $\epsilon$ | E          | Epsilon | <i>e</i>      | Small quantities, permittivity, $\epsilon$ (variant epsilon)  |
| 6     | $\zeta$    | Z          | Zeta    | <i>z</i>      | Zeta functions, complex numbers                               |
| 7     | $\eta$     | H          | Eta     | <i>e</i>      | Efficiency, viscosity   |
| 8     | $\theta$   | $\Theta$   | Theta   | <i>th</i>     | Angles, unknown variables                                     |
| 9     | $\iota$    | I          | Iota    | <i>i</i>      | Small quantity  |
| 10    | $\kappa$   | K          | Kappa   | <i>k</i>      | Torsion constant  |
| 11    | $\lambda$  | $\Lambda$  | Lambda  | <i>l</i>      | Wavelength, Lagrange multiplier                               |
| 12    | $\mu$      | M          | Mu      | <i>m</i>      | Friction coefficient, permeability                            |
| 13    | $\nu$      | N          | Nu      | <i>n</i>      | Frequency, Reynolds number                                    |
| 14    | $\xi$      | $\Xi$      | Xi      | <i>ks</i>     | Random variables, logic                                       |
| 15    | O          | O          | Omicron | <i>o</i>      | Rarely used   |
| 16    | $\pi$      | $\Pi$      | Pi      | <i>p</i>      | Circumference/diameter ratio, products, $\varpi$ (variant pi) |
| 17    | $\rho$     | P          | Rho     | <i>r</i>      | Density, polar coordinates                                    |
| 18    | $\sigma$   | $\Sigma$   | Sigma   | <i>s</i>      | Sum, standard deviation, $\varsigma$ (final sigma)            |
| 19    | $\tau$     | T          | Tau     | <i>t</i>      | Time, time constant   |
| 20    | $\upsilon$ | $\Upsilon$ | Upsilon | <i>u</i>      | Particle physics  |
| 21    | $\phi$     | $\Phi$     | Phi     | <i>f</i>      | Wave function, electric potential, $\varphi$ (variant phi)    |
| 22    | $\chi$     | X          | Chi     | <i>kh</i>     | Statistics (chi-square test)                                  |
| 23    | $\psi$     | $\Psi$     | Psi     | <i>ps</i>     | Wave function in quantum mechanics                            |
| 24    | $\omega$   | $\Omega$   | Omega   | <i>o</i>      | Angular frequency, electrical resistance                      |

**Table:** Table of Greek letters with their meanings and common usage.