

Prefix

Prefix

SI-prefix

SI-prefix	Symbol	Decimal
Yotta	Y	1e24
Zetta	Z	1e21
Exa	E	1e18
Peta	P	1e15
Tera	T	1e12
Giga	G	1e9
Mega	M	1e6
Kilo	k	1e3
Hecto	h	1e2
Deca	da	1e1
Deci	d	1e - 1
Centi	c	1e - 2
Milli	m	1e - 3
Micro	μ	1e - 6
Nano	n	1e - 9
Pico	p	1e - 12
Femto	f	1e - 15
Atto	a	1e - 18
Zepto	z	1e - 21
Yocto	y	1e - 24

Constants

Constants

Name	Variable	Value
Speed of light in a vacuum	c	299 792 458
Planck's constant	h	$6.626\,070\,15 \cdot 10^{-34}$
Planck's constant	h	$4.135\,667\,87 \cdot 10^{-15}$
Planck's constant	\hbar	$1.054\,573 \cdot 10^{-34}$
Planck's constant	\hbar	$0.658\,212 \cdot 10^{-15}$
The Elemental Charge	e	$1.602\,176\,634 \cdot 10^{-19}$
Bohr Radius	a_0	$5.291\,772\,109\,03 \cdot 10^{-11}$
Electron Mass	m_e	$9.109\,383\,7015 \cdot 10^{-31}$
Electron Mass	m_e	0.510 998 954
Proton Mass	m_p	$1.672\,621\,923\,69 \cdot 10^{-27}$
Proton Mass	m_p	938.272 096
Proton Mass	m_p	1836.152 673 43
Neutron Mass	m_n	$1.674\,927\,498\,04 \cdot 10^{-27}$
Neutron Mass	m_n	939.565 428
Neutron Mass	m_n	1838.683 661 73
Boltzmanns Constant	k	$1.380\,649 \cdot 10^{-23}$
Boltzmanns Constant	k	$8.617\,333\,6333 \cdot 10^{-5}$
Avogadros Constant	N_A	$6.022\,140\,76 \cdot 10^{23}$
Rydbergs Constant	R_y	$\frac{\hbar^2}{2ma_0^2}$
Rydbergs Constant	R_y	13.6057
Rydbergs Constant	R_y	109 737.32
The General Gas Constant	R	8.314 462 618
The Fine Structure Constant	α	$\frac{e^2}{4\pi\epsilon_0\hbar c} = \frac{1}{137.036}$
Dielectric Constant for Vacuum	ϵ_0	$0.885\,419 \cdot 10^{-11}$
Permeability of Vacuum	μ_0	$1.256\,637\,062\,12 \cdot 10^{-6}$
Permeability of Vacuum	μ_0	$4\pi \cdot 10^{-7}$
The Bohr Magneton	μ_B	$\frac{e\hbar}{2m} = 9.274\,010\,0783 \cdot 10^{-24}$