

	Index Form	Ordinary Form																Fraction Form				
Trillion	10^{12}	1	0	0	0	0	0	0	0	0	0	0	0	0	0							
Billion	10^9				1	0	0	0	0	0	0	0	0	0	0							
Million	10^6							1	0	0	0	0	0	0	0							
Hundred Thousand	10^5								1	0	0	0	0	0	0							
Ten Thousand	10^4									1	0	0	0	0	0							
Thousand	10^3										1	0	0	0	0							
Hundred	10^2											1	0	0	0							
Ten	10^1												1	0	0							
One	10^0													1	0							
Tenth	10^{-1}													0	.	1					$\frac{1}{10}$	
Hundredth	10^{-2}													0	.	0	1				$\frac{1}{100}$	
Thousandth	10^{-3}													0	.	0	0	1			$\frac{1}{1000}$	
Ten-Thousandth	10^{-4}													0	.	0	0	0	1		$\frac{1}{10000}$	
Hundred-Thousandth	10^{-5}													0	.	0	0	0	0	1	$\frac{1}{100000}$	
Millionths	10^{-6}													0	.	0	0	0	0	0	1	$\frac{1}{1000000}$

Standard Index Form

Greater than or equal to 1 but less than 10

$\square \times 10^{\square}$

power or index or exponent

base 10

multiplication

Power of 10

π e

$\times 10^x$

Metric Measures

Length

1km = 1000m

1m = 100cm

1cm = 10mm

Index Laws

For powers of the same base

$a^m \times a^n = a^{m+n}$

$a^m \div a^n = a^{m-n}$

$(a^m)^n = a^{m \times n}$