

Symbol	Symbol Name	Meaning / definition	Example
=	equals sign	equality	$5 = 2+3$ , 5 is equal to 2+3
≠	not equal sign	inequality	$5 \neq 4$ , 5 is not equal to 4
≈	approximately equal	approximation	$\sin(0.01) \approx 0.01$ , $x \approx y$ means x is approximately
>	strict inequality	greater than	$5 > 4$ , 5 is greater than 4
<	strict inequality	less than	$4 < 5$ , 4 is less than 5
≥	inequality	greater than or equal to	$5 \geq 4$ , $x \geq y$ means x is greater than or
≤	inequality	less than or equal to	$4 \leq 5$ , $x \leq y$ means x is less than or equal
( )	parentheses	calculate expressions inside first	$2 \times (3+5) = 16$
[ ]	brackets	calculate expressions inside first	$[(1+2) \times (1+5)] = 18$
+	plus sign	addition	$1 + 1 = 2$
-	minus sign	subtraction	$2 - 1 = 1$
±	plus - minus	both plus and minus operations	$3 \pm 5 = 8$ or $-2$
∓	minus - plus	both minus and plus operations	$3 \mp 5 = -2$ or $8$
*	asterisk	multiplication	$2 * 3 = 6$
×	times sign	multiplication	$2 \times 3 = 6$
·	multiplication dot	multiplication	$2 \cdot 3 = 6$
÷	division sign / obelus	division	$6 \div 2 = 3$
/	division slash	division	$6 / 2 = 3$
mod	modulo	remainder calculation	$7 \bmod 2 = 1$
.	period	decimal point, decimal separator	$2.56 = 2+56/100$
a <sup>b</sup>	power	exponent	$2^3 = 8$
a^b	caret	exponent	$2^3 = 8$
√a	square root	$\sqrt{a} \cdot \sqrt{a} = a$	$\sqrt{9} = \pm 3$
<sup>3</sup> √a	cube root	$\sqrt[3]{a} \cdot \sqrt[3]{a} \cdot \sqrt[3]{a} = a$	$\sqrt[3]{8} = 2$
<sup>4</sup> √a	fourth root	$\sqrt[4]{a} \cdot \sqrt[4]{a} \cdot \sqrt[4]{a} \cdot \sqrt[4]{a} = a$	$\sqrt[4]{16} = \pm 2$
<sup>n</sup> √a	n-th root (radical)	n/a	for n=3, $\sqrt[3]{8} = 2$
%	percent	$1\% = 1/100$	$10\% \times 30 = 3$
‰	per-mille	$1\text{‰} = 1/1000 = 0.1\%$	$10\text{‰} \times 30 = 0.3$
ppm	per-million	$1\text{ppm} = 1/1000000$	$10\text{ppm} \times 30 = 0.0003$
ppb	per-billion	$1\text{ppb} = 1/1000000000$	$10\text{ppb} \times 30 = 3 \times 10^{-7}$
ppt	per-trillion	$1\text{ppt} = 10^{-12}$	$10\text{ppt} \times 30 = 3 \times 10^{-10}$

