

Common Mathematical Symbols (*just a small few*)

Symbol	Symbol Name	Meaning / definition	Example
=	equals sign	equality	$5 = 2+3$
\neq	not equal sign	inequality	$5 \neq 4$
>	strict inequality	greater than	$5 > 4$
<	strict inequality	less than	$4 < 5$
\geq	inequality	greater than or equal to	$5 \geq 4$
\leq	inequality	less than or equal to	$4 \leq 5$
()	parentheses	calculate expression inside first	$2 \times (3+5) = 16$
+	plus sign	addition	$1 + 1 = 2$
-	minus sign	subtraction	$2 - 1 = 1$
*	asterisk	multiplication	$2 * 3 = 6$
\times	times sign	multiplication	$2 \times 3 = 6$
.	multiplication dot	multiplication	$2 \cdot 3 = 6$
\div	division sign / obelus	division	$6 \div 2 = 3$
/	division slash	division	$6 / 2 = 3$
-	horizontal line	division / fraction	$\frac{6}{2} = 3$
.	period	decimal point, decimal separator	$2.56 = 2+56/100$
a^b	power	exponent	$2^3 = 8$
a^b	caret	exponent	$2 \wedge 3 = 8$
\sqrt{a}	square root	$\sqrt{a} \cdot \sqrt{a} = a$	$\sqrt{9} = \pm 3$
$\sqrt[3]{a}$	cube root		$\sqrt[3]{8} = 2$
%	percent	$1\% = 1/100$	$10\% \times 30 = 3$
\sphericalangle	angle	formed by two rays	$\sphericalangle ABC = 30^\circ$
\perp	right angle	$= 90^\circ$	$\alpha = 90^\circ$
$^\circ$	degree	1 turn = 360°	$\alpha = 60^\circ$
	parallel	parallel lines	$AB \parallel CD$
\cong	congruent to	equivalence of geometric shapes and size	$\triangle ABC \cong \triangle XYZ$
\sim	similarity	same shapes, not same size	$\triangle ABC \sim \triangle XYZ$
\triangle	triangle	triangle shape	$\triangle ABC \cong \triangle BCD$
$ x-y $	distance	distance between points x and y $\pi = 3.141592654\dots$	$ x-y = 5$
π	pi constant	is the ratio between the circumference and diameter of a circle	$c = \pi \cdot d = 2 \cdot \pi \cdot r$
rad	radians	radians angle unit	$360^\circ = 2\pi \text{ rad}$
grad	grads	grads angle unit	$360^\circ = 400 \text{ grad}$
x	x variable	unknown value to find	when $2x = 4$, then $x = 2$
\sim	approximately equal	weak approximation	$11 \sim 10$
∞	lemniscate	infinity symbol	
x!	exclamation mark	factorial	$4! = 1*2*3*4 = 24$
x	single vertical bar	absolute value	$ -5 = 5$
f(x)	function of x	maps values of x to f(x)	$f(x) = 3x+5$
Δ	delta	change / difference	$\Delta t = t_1 - t_0$
\sum	sigma	summation - sum of all values in range of series	$\sum x_i = x_1+x_2+\dots+x_n$
P(A)	probability function	probability of event A	$P(A) = 0.5$
&	ampersand	and	$x \& y$