Table of mathematical symbols

Symbol	Meaning	Typical usage
$\therefore$	Therefore	y is double the value of x, $\therefore y + 1 = 2x + 1$
$\implies$	Implies	$x = 5 \implies x + 1 = 6$
$=$	Equal to	$x = 5$
$\neq$	Not equal to	$5 \neq 6$
$\approx$	Approximately equal to	$\pi \approx 3.16$
$>$	Greater than	$6 > 5$
$\geq$	Greater than or equal to	$6 \geq 5$ and $5 \geq 5$
$\leq$	Less than	$5 < 6$
$\leq$	Less than or equal to	$5 \leq 6$ and $5 \leq 5$
$\lvert x \rvert$	Absolute value of x	$\lvert -5 \rvert = 5$
∞	(Positive) infinity	This is not a *number*, but a concept. A sequence that gets larger without bound is said to "approach infinity".
j	The imaginary unit	By definition, $\sqrt{-1} = j$
$\mathbb{N}$	The set of natural numbers	$1, 2, 3, 4, 5, 6, \ldots$
$\mathbb{Z}$	The set of integers (whole numbers)	$0, 1, -1, 2, -2, 3, -3, 4, -4, 5 \ldots$
$\mathbb{Q}$	The set of rational numbers	This includes every integer, and every number that can be expressed as a fraction of two integers, e.g. $3, \frac{2}{5}, -14.2$
$\mathbb{R}$	The set of real numbers	This includes every rational number, and every irrational number such as π or $\frac{1}{3}\pi$
$\mathbb{C}$	The set of complex numbers	This includes every combination of a real number and an imaginary number, e.g. $3 + j5$
$\to$	Tends towards	If $x_n = n$, then $x \to +\infty$ as $n \to \infty$
$\in$	Is a member of	$3 \in \{2, 3, 8, 32\}$