

List of Math Symbols

- \mathbb{R} = real numbers
- \mathbb{Z} = integers
- \mathbb{N} = natural numbers
- \mathbb{Q} = rational numbers
- \mathbb{P} = irrational numbers
- \subseteq = subset (a part of the whole thing)
- \exists = there exists
- \forall = for every
- \in = element of
- \cup = union (or)
- \cap = intersection (and)
- s.t. = such that
- \Rightarrow = implies
- \Leftrightarrow = if and only if
- \sum = sum
- \setminus = set minus
- \therefore = therefore
- open interval $(a, b) = \{x : a < x < b\}$
- closed interval $[a, b] = \{x : a \leq x \leq b\}$
- half open interval $[a, b) = \{x : a \leq x < b\}$
- half open interval $(a, b] = \{x : a < x \leq b\}$
- $(a, \infty) = \{x : a < x\}$
- $[a, \infty) = \{x : a \leq x\}$
- $(-\infty, b) = \{x : x < b\}$
- $(-\infty, b] = \{x : x \leq b\}$
- $(-\infty, \infty) = \mathbb{R}$
- $|a| = \begin{cases} a & \text{for } a \geq 0 \\ -a & \text{for } a < 0 \end{cases}$ In particular, $|-3.2| = 3.2$.
- Note that $\sqrt{x^2} = |x|$.