

Useful Latex Commands for CMSC 250

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1 General

Not Equal: \neq - `\neq`

Exponentiation: a^b - `a^b`

Square root: \sqrt{x} - `\sqrt{x}`

Nth root: $\sqrt[n]{x}$ - `\sqrt[n]{x}`

Multiplication symbol: \times - `\times`

Division symbol: \div - `\div`

Fraction: $\frac{a}{b}$ - `\frac{a}{b}`

Floor: $\lfloor a \rfloor$ - `\lfloor a \rfloor` `a \rfloor`

Ceiling: $\lceil a \rceil$ - `\lceil a \rceil` `a \rceil`

Natural Numbers: \mathbb{N} - `\mathbb{N}`

Integers: \mathbb{Z} - `\mathbb{Z}`

Positive Integers: \mathbb{Z}^+ - `\mathbb{Z}^+`

Dots: \dots - `\dots`

Left brace: $\{$ - `\{`

Right brace: $\}$ - `\}`

Summation: $\sum_{i=1}^n i^2 + i$ - `\sum_{i=1}^n i^2+i`

Product notation: $\prod_{i=1}^n i^2 + i$ - `\prod_{i=1}^n i^2+i`

2 Greek Letters

Epsilon: ϵ - `\epsilon`

3 Logical

Logical Negation: \bar{p} or \overline{p} - `\bar{p}` or `\overline{p}`

Logical Not: $\neg p$ - `\not p`

Logical And / Conjunction: \wedge - `\land`

Logical Or / Disjunction: \vee - `\lor`

Exclusive Or / XOR: \oplus - `\oplus`

Implication: \implies - `\implies`

Biconditional / If and Only If: \iff - `\iff`

Triple Bar: \equiv - `\equiv`

4 Quantifiers

For all: \forall - `\forall`

There exists: \exists - `\exists`

5 Set Notation

Is element of: \in - `\in`

Not element of: \notin - `\notin`

Is proper subset of: \subset - `\subset`

Not proper subset of: $\not\subset$ - `\not\subset`

Is subset of: \subseteq - `\subseteq`

Not subset of: $\not\subseteq$ - `\not\subseteq`

Union: \cup - `\cup`

Intersection: \cap - `\cap`

Complement of set A: \overline{A} - `\overline{A}`

Set Difference/Minus: \setminus - `\setminus`

Cartesian Product: \times - `\times`

Power Set: 2^A - `2^A`

6 Counting

Combinations: $\binom{n}{2}$ - `\binom{n}{2}`

Falling Factorial: $(n)_k$ - `(n)_k`