

<http://cs.gettysburg.edu/~cpresser/cs201/syllabus.html>

Variables

Sentences

Universal - "all"

Conditional - if... then

Existential - "there is"

Universal	Conditional
"	Existential
Existential	Universal

Sets $\{1, 2, 3\}$

collection of "stuff"
unordered, no repeats

List
ordered (x, y)
repeats

$\{1, 2, 3, \dots, 10\}$ $\{3, 1, \{0\}\}$

$\{1, 2, \{3, 4, 5\}\}$

$\{\} = \emptyset$ empty set

$\{\{\}\}$

\mathbb{R} - real #'s

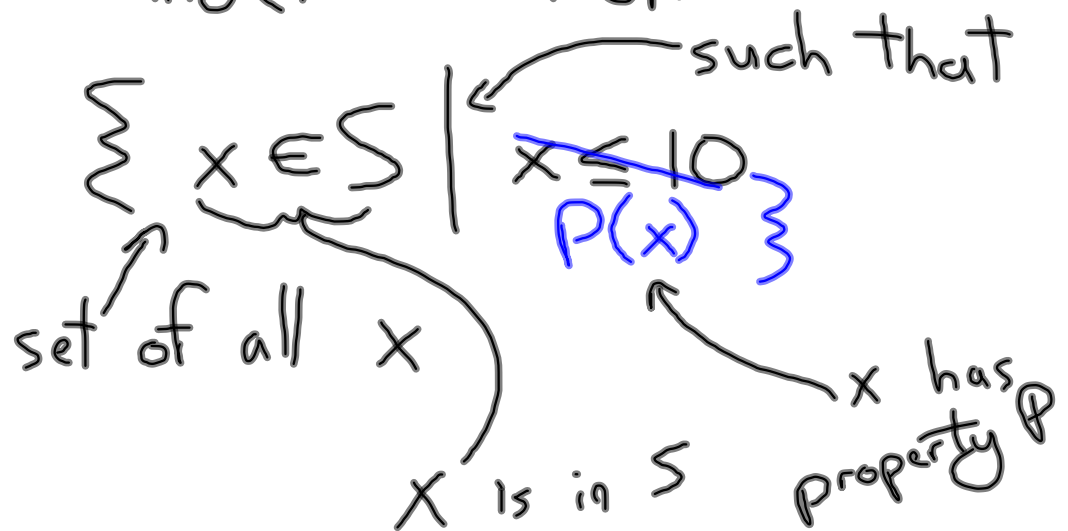
\mathbb{Z} - integers

\mathbb{Z}^+ pos int.

$\mathbb{Z}_{\text{nonneg}}$

\mathbb{Q} rational

Set Builder notation



$$\{x \in \mathbb{Z} \mid -10 < x \leq 10\}$$