

Foundations I

Lecture 1

Homework online @
Alzalg's website

$$\mathbb{N} = \{1, 2, 3, \dots\} \text{ Natural Numbers}$$

$$\mathbb{Z} = \{0, \pm 1, \pm 2, \dots\} \text{ Integers}$$

$$\mathbb{R} = (-\infty, \infty) \text{ Real \#s}$$

- ① Mathematical Logic - exam 1
- ② Asymptotic Analysis - exam 2
- ③ Graph Theory - Final

Run Time ??

LOGIC

1) Propositional

2) Predicate

Propositional Logic -

- true or false statement (cannot be both)

ex) $2+3=4$ → false proposition

ex) Be careful → not a proposition

ex) $x+y=0$ → not a proposition (could be TRUE or FALSE)
→ values not assigned