

Trace - Real Analysis, Lecture #1

Overview

- * Sets and their operations (union, intersection, complement, DeMorgan's laws),
- * The well-ordering principle of the natural numbers,
- * The theorem of mathematical induction and applications.

Some high level notes

Discussed set relations, proved one of DeMorgan's laws. Introduced induction with well-ordered principal of natural numbers. Introduced proof by contradiction and proved induction using it. Used induction later to proof two examples.

Lecture notes from the course page itself

https://ocw.mit.edu/courses/18-100a-real-analysis-fall-2020/resources/mit18_100af20_lec194/

Assignment (will need to watch lecture #2 before solving)

https://ocw.mit.edu/courses/18-100a-real-analysis-fall-2020/resources/mit18_100af20_hw1/