





#### **About this Class**

No problem scores in this section

### How to use this website

No problem scores in this section

### MITx Philosophy Award

No problem scores in this section

### **Acknowledgments**

No problem scores in this section

## **Entrance Survey**

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No problem scores in this section

# Infinite Cardinalities

No problem scores in this section

**Hilbert's Hotel** (8/8) 100%

Practice Scores: 1/1 1/1 3/3 1/1 1/1 1/1

Size Comparisons (4/4) 100%

**Practice Scores:** 1/1 1/1 1/1 1/1

The Real Numbers (11/12) 92%

**Practice Scores:** 1/1 1/1 1/1 2/2 1/1 0/1 1/1 1/1

1/1 1/1 1/1

Cantor's Theorem

No problem scores in this section

The Power Set of Natural Numbers (3/4) 75%

Practice Scores: 1/1 1/1 0/1 1/1

**Summary and Further Resources** 

No problem scores in this section

Homework (95/100) 95%

Homework *due Jun 24, 2020 21:30 IST* 

**Problem Scores:** 15/15 15/15 0/5 20/20 5/5

5/5 10/10 10/10

The Higher Infinite

<u>Introduction</u>

No problem scores in this section

The Higher Infinite (1/1) 100%

Practice Scores: 1/1

**Ordinals** (14/16) 88%

Practice Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1/1 1/1 2/2 1/1 1/1 0/1 0/1

Ordinal Arithmetic (7/7) 100%

Practice Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1

**Ordinals as Blueprints** 

No problem scores in this section

**Paradox** 

No problem scores in this section

**Summary and Further Resources** 

No problem scores in this section

Homework (100/100) 100%

Homework due Jul 1, 2020 21:30 IST

**Problem Scores:** 25/25 25/25 25/25 10/10 5/5 10/10

Omega-Sequence Paradoxes

No problem scores in this section

Omega-Sequence Paradoxes (3/3) 100%

Practice Scores: 1/1 1/1 1/1

Rational Decision-Making (2/2) 100%

Practice Scores: 1/1 1/1

Reverse Omega-Sequence Paradoxes (1/1) 100%

Practice Scores: 1/1

**<u>Hat-Problems</u>** (7/7) 100%

Practice Scores: 1/1 3/3 1/1 1/1 1/1

**Summary and Further Resources** 

No problem scores in this section

[Bonus: Meet the Experts]

No problem scores in this section

Homework (75/100) 75%

Homework due Jul 8, 2020 21:30 IST

Problem Scores: 40/40 20/20 15/30 0/10

Time Travel

**Introduction** 

No problem scores in this section

<u>Time Travel</u> (2/2) 100%

Practice Scores: 2/2

Time Travel and Physical Law (0/1) 0%

Practice Scores: 0/1

Free Will (3/3) 100%

Practice Scores: 2/2 1/1

**Summary and Further Resources** 

No problem scores in this section

[Bonus: Meet the Expert]

No problem scores in this section

Homework (50/100) 50%

Homework *due Jul 15, 2020 21:30 IST* 

**Problem Scores:** 30/30 10/20 0/30 10/20

Newcomb's Problem **Introduction** 

No problem scores in this section

**The Problem** (0/1) 0%

Practice Scores:

Maximizing Expected Value (8/8) 100%

**Practice Scores:** 3/3 2/2 1/1 1/1 1/1

In Defense of Two-Boxing

No problem scores in this section

Causal Decision Theory (8/8) 100%

Practice Scores: 2/2 2/2 1/1 1/1 1/1 1/1

**Summary and Further Resources** 

No problem scores in this section

[Appendix: The Prisoner's Dilemma] (4/4) 100%

Practice Scores: 1/1 1/1 2/2

[Appendix: The Tickle Defense] (0/1) 0%

Practice Scores: 0/1

<u>Homework</u> (100/100) 100%

Homework due Jul 22, 2020 21:30 IST

Problem Scores: 30/30 20/20 20/20 30/30

## Probability

No problem scores in this section

Probability, Subjective, and Objective (1/1) 100%

Practice Scores: 1/1

Subjective Probability (6/7) 86%

Practice Scores: 1/1 1/1 2/2 1/1 1/1 0/1

Objective Probability (9/9) 100%

Practice Scores: 1/1 1/1 1/1 2/2 1/1 1/1 1/1 1/1

The Principle of Countable Additivity (1/1) 100%

Practice Scores: 1/1

[Optional: The Two-Envelope Paradox] (4/4) 100%

Practice Scores: 1/1 1/1 1/1 1/1

**Further Resources** 

No problem scores in this section

[Bonus: Meet the Expert]

No problem scores in this section

Homework (70/70) 100%

Homework due Jul 29, 2020 21:30 IST

**Problem Scores:** 20/20 20/20 20/20 10/10

Non-Measurable Sets <u>Introduction</u>

No problem scores in this section

Measures (23/23) 100%

Non-Measurable Sets (5/6) 83%

Practice Scores: 1/1 1/1 0/1 2/2 1/1

**Summary and Further Resources** 

No problem scores in this section

Homework (98.5/100) 98%

Homework *due Aug 5, 2020 21:30 IST* 

**Problem Scores:** 28.5/30 30/30 10/10 10/10 20/20

The Banach-Tarski Theorem

No problem scores in this section

The Banach-Tarski Theorem: Three Warm-Up Cases (0/5) 0%

**Practice Scores:** 0/1 0/1 0/1 0/1 0/1

**The Theorem** (0/4) 0%

**Practice Scores:** 0/1 0/1 0/1 0/1

**Summary and Further Resources** 

No problem scores in this section

Computability

**Introduction** 

No problem scores in this section

Turing Machines (8/9) 89%

**Practice Scores:** 1/1 1/1 1/1 1/1 1/1 1/1 0/1

1/1

Non-computable functions (9/9) 100%

Practice Scores: 1/1 1/1 1/1 1/1 1/1 1/1 2/2 1/1

**Efficiency** 

No problem scores in this section

[Optional: The Big Number Duel] (0/2) 0%

Practice Scores: 0/1 0/1

**Summary and Further Resources** 

No problem scores in this section

[Bonus: Meet the Expert]

No problem scores in this section

Homework (80/80) 100%

Homework due Aug 19, 2020 21:30 IST

**Problem Scores:** 20/20 10/10 20/20 20/20 10/10

Godel's Theorem

Introduction (1/1) 100%

Practice Scores: 1/1

**Godel's Theorem** (8/8) 100%

Practice Scores: 5/5 3/3

A Proof of Godel's Theorem

No problem scores in this section

The Philosophical Significance of Godel's Theorem

No problem scores in this section

**Summary and Further Resources** 

No problem scores in this section

[Appendix: Proof of the Lemma] (0/4) 0%

**Practice Scores:** 0/1 0/1 0/1 0/1

Homework (67/75) 89%

Homework due Aug 26, 2020 21:30 IST

**Problem Scores:** 20/20 15/15 12/20 20/20

Glossary <u>Symbols and Concepts</u>

No problem scores in this section

Exit Survey <u>Exit Survey</u>

No problem scores in this section