### BOOK OF PROOF EXERCISES

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# Contents

1	Sets	3																;
	1.1	Exercises	 	 		 		 						 				,

#### Purpose

I am studying the BOOK OF PROOF as preparation for the mathematical portion of Machine Learning studies that I have based on the Carnegie Mellon Machine Learning masters program. Specifically, this is part of my effort to prepare for studying materials covered in the '36-700 Probability & Mathematical Statistics or 36-705 Intermediate Statistics' course requirement.

After completing this survey in forming mathematical proofs, I will begin studying probability, mathematical stattistics and calculus as they comprise the bulk of the mathematical underpinnings of machine learning.

## Chapter 1

# Sets

#### Exercises 1.1

A Write each of the following sets by listing their elements between braces.

```
1\ \{5x-1:x\epsilon Z\}=\{...,-16,-11,-6,4,9,14,...\}
2
```