- 1. Write your name in the space below.
- 2. Prove or disprove: The set of infinite strings over the alphabet $\{a,b,c\}$ is countable.

3. Prove or disprove: The set of three-dimensional integer lattice points is countable.

4. Prove or disprove: The set of all syntactically correct Python programs is countable.

5.	Prove	or	disprove:	The	language	of	context-free	grammars	that	generate	the	empty
	string i	is (decidable.									

6. Prove or disprove: The set of strings that are Python programs that each output 0 for all inputs is a decidable language.