Guess a Number

Homework 2

Due: Monday 12th Feb, 10am (start of class)

```
S ::= A S | A
A ::= A S | B
B ::= C S D | E
```

- What are the terminals and non-terminals for this grammar? (In class)
- Show that this grammar is ambiguous by giving a token sequence that has two possible concrete syntax trees (two derivations)
- Construct an unambiguous grammar to describe the same language, using BNF.
- Construct another unambiguous grammar to describe the same language, using EBNF.

(Adapted from Fundamental Structures of Computer Science, Wulf, Shaw, Hilfinger, Flon, pp 370)