

Programming Language Syntax

2.6 Exercises

- 2.28 Give an example of an erroneous program fragment in which consideration of semantic information (e.g., types) might help one make a good choice between two plausible “corrections” of the input.
- 2.29 Give an example of an erroneous program fragment in which the “best” correction would require one to “back up” the parser (i.e., to undo recent predictions/matches or shifts/reductions).
- 2.30 Prove that the grammars in Figure ©2.36 lie in the regions claimed.
- 2.31 (Difficult) Prove that the languages in Figure ©2.38 lie in the regions claimed.
- 2.32 Prove that regular expressions and *left-linear grammars* are equally powerful. A left-linear grammar is a context-free grammar in which every right-hand side contains at most one nonterminal, and then only at the left-most end.

