CS480
Translators

Test 1 Review
Why have a Tag in the Token?

expression → expression + term
expression → expression - term
expression → term
term → term * factor
term → term / factor
term → factor
factor → ( expression )
factor → id

Figure 4.2: Grammar for simple arithmetic expressions
Test 1 Review

• Characteristics common to all translators
• Construct an expression tree
• Polish and Reverse polish notation
• Construct a DFA from a regular expression
• Change a NFA to a DFA w/ subset construction
• Syntax vs. Semantics
• Why would a lexical analyzer peek at a character
• Symbol Table(s)
• The purpose of a token
• What is the purpose of Lex
Example Question for DFAs

• Suppose comments are defined by a two character sequence, a slash followed by a star, as in the C convention of /* whatever */. Comments can contain any text, including the star symbol and slash, just not the two character sequence that ends the comment. So /***/ is a legal comment, but /**/ is not. Write a DFA recognizing legal comments.