

The following is a grammar for simple arithmetic expressions composed of non-negative integers, the operators binary +, -, *, / and unary -, and parentheses

$\langle \text{expression} \rangle ::= \langle \text{term} \rangle$
 $\langle \text{expression} \rangle ::= \langle \text{expression} \rangle + \langle \text{term} \rangle$
 $\langle \text{expression} \rangle ::= \langle \text{expression} \rangle - \langle \text{term} \rangle$

$\langle \text{term} \rangle ::= \langle \text{factor} \rangle$
 $\langle \text{term} \rangle ::= \langle \text{term} \rangle * \langle \text{factor} \rangle$
 $\langle \text{term} \rangle ::= \langle \text{term} \rangle / \langle \text{factor} \rangle$

$\langle \text{factor} \rangle ::= \langle \text{non-negative integer} \rangle$
 $\langle \text{factor} \rangle ::= - \langle \text{factor} \rangle$
 $\langle \text{factor} \rangle ::= (\langle \text{expression} \rangle)$

For example, using this grammar the expression - 2 + 3 * 4 would be parsed as follows

