Table 1: BNF grammar: Random Rule Application.

```
<sentence> ::= <subject> <predicate>
<subject> ::= <article> <noun>
<predicate> ::= <verb> <directobject>
<directobject> ::= <article> <noun>
<article> ::= THE | A
<noun> ::= MAN | DOG
<verb> ::= BITES | PETS
```

Result: TRUE (Number of applied rules: 9) A MAN BITES THE DOG
<sentence> ::= <subject> <predicate> <subject> ::= <article> <noun> <article> ::= A <noun> ::= MAN <predicate> ::= <verb> <directobject> <verb> ::= BITES <directobject> ::= <article> <noun> <article> ::= THE <noun> ::= DOG

Table 2: BNF grammar: Random Rule Application.

```
<sentence> ::= if <expr>  return <expr>  else return <value>
<expr> ::= ( <expr> <op> <expr> ) | <value>
<op> ::= + | - | * | /
<value> ::= X | Y | Z
```

Result: TRUE (Number of applied rules: 6) if Y return Z else return Z
<sentence> ::= if <expr> return <expr> else return <value> <expr> ::= <value> <value> ::= Y <expr> ::= <value> <value> ::= Z <value> ::= Z