1: Write the BNF for a real number that can be represented as either a whole number plus a decimal part that are separated by a decimal point or represented using exponential notation (by adding an E + or - an exponent).

< REAL : (< DIGIT >) + ("." (< DIGIT >)*)? + ("E" ("+"|"-") < DIGIT >)? >

2: Write the BNF for a Java method heading. Include the first line of a method including possible attributes, the return type, the method name and a parameter list.

< TYPE > (< IDENT >)? "(" ((< TYPE > < IDENT >)*)? ")"

3: Write the BNF for a Java switch statement.

<SWITCH> "(" <IDENT> ")" "{" ((<CASE> <IDENT> ":" expression() *)? ((<DEFAULT> ":" expression() *)? "}"

4: Write the BNF for a Java array declaration of any number of dimensions.

< TYPE > < IDENT > "[" < DIGIT > "]"

5: Write a sequence of Java statements that will be considered correct according to the following BNF:

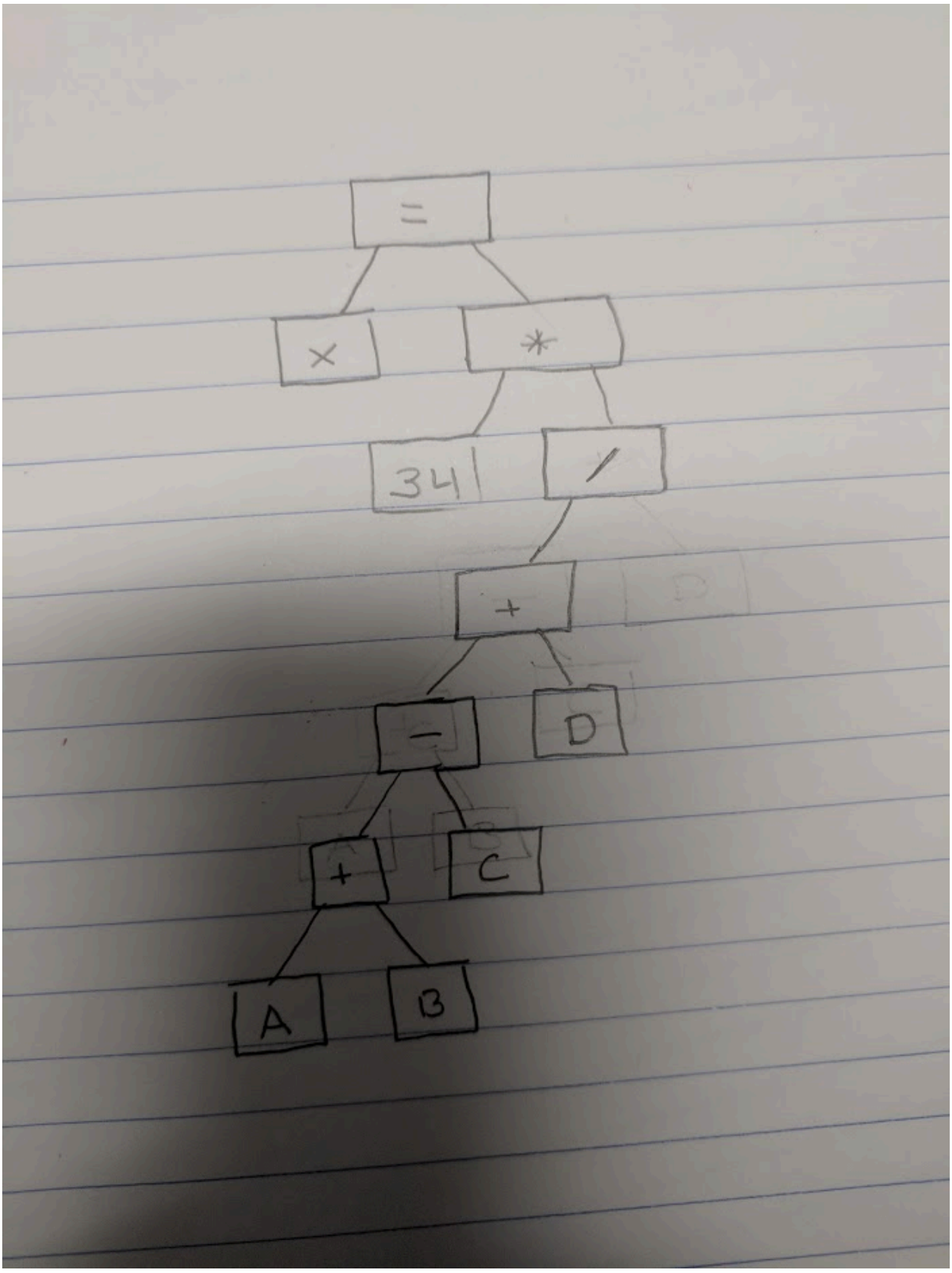
Block = "{" (Statement ";")* "}":

```
{
    abc = 123;
    print "you and me";
}
```

6: Correct the BNF for a block of statements so that the semicolon is not require before a "}"

Block = "{" (Statement (";")?)* "}":

7: Draw the parse tree for the following assignment statement: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