

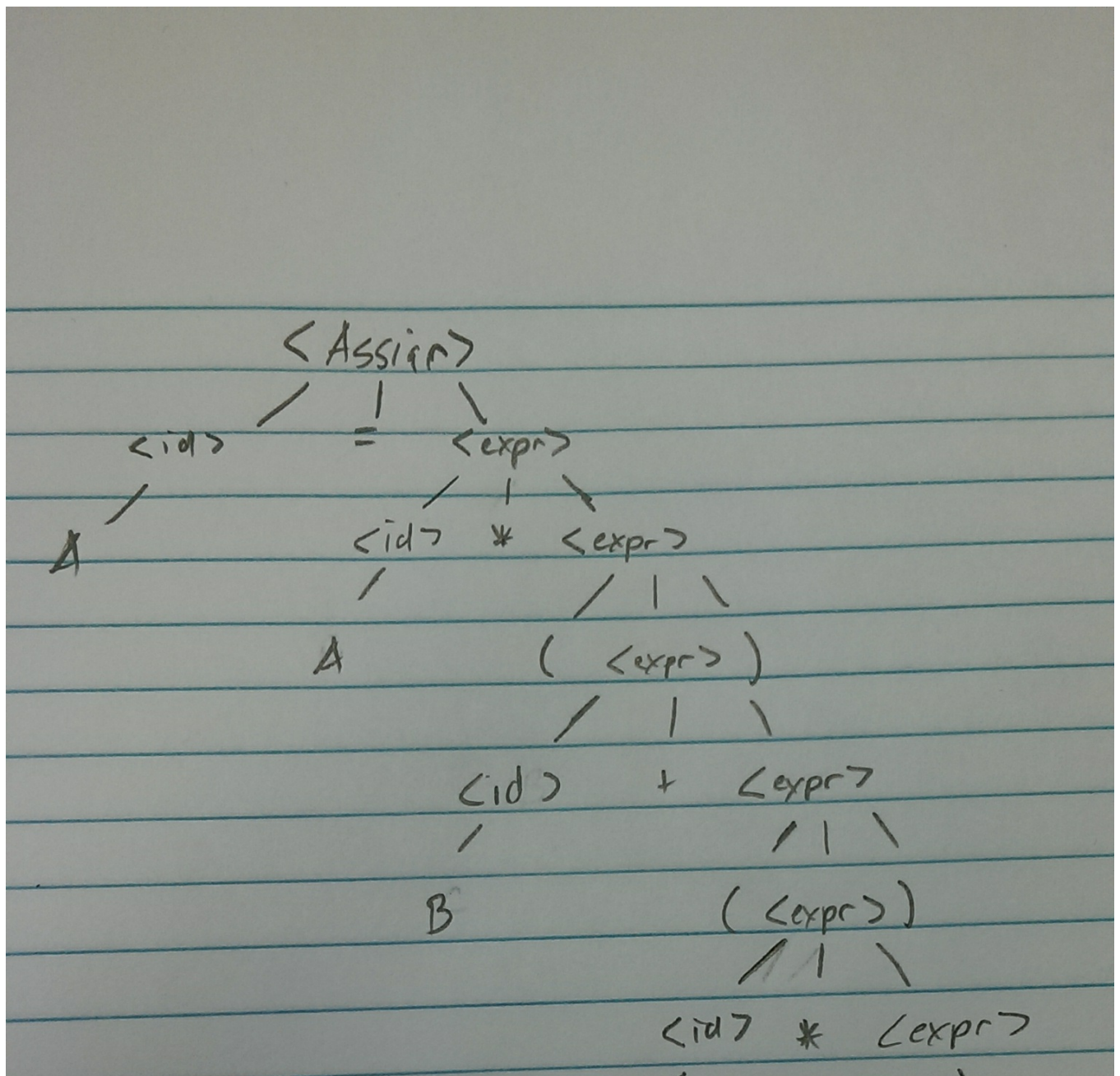
Problem Set:

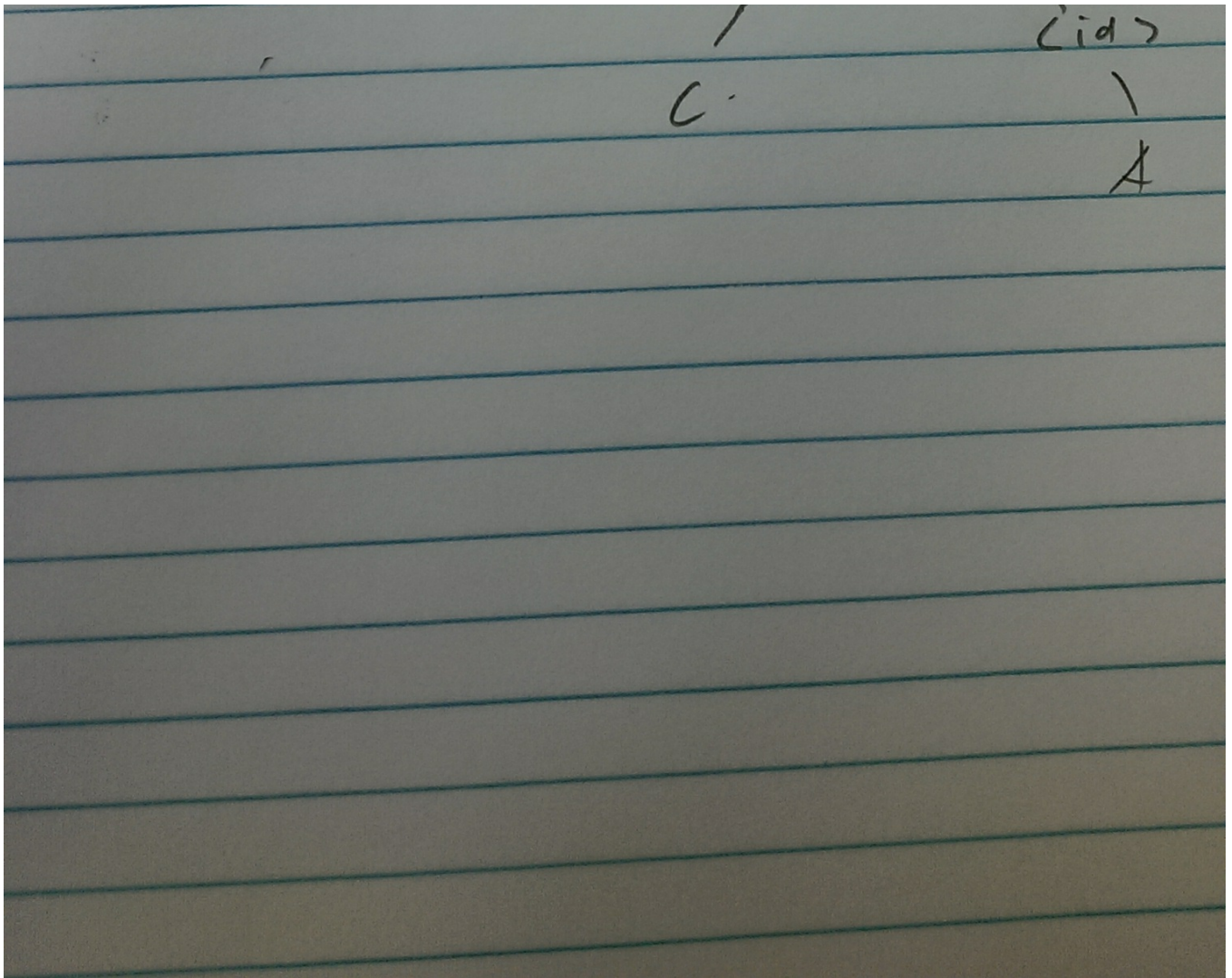
2a.

```
<class_definition> ::= [public] [(abstract|final)] <name> [extends <name>] [implements <id>{, <id>{}}]  
<id> ::= [A-Za-z0-9_]+
```

6a.

```
<assign> -> <id> = <expr>  
    A = <expr>  
    A = <id> * <expr>  
    A = A * <expr>  
    A = A * (<expr>)  
    A = A * (<id> + <expr>)  
    A = A * (B + <expr>)  
    A = A * (B + (<expr>))  
    A = A * (B + (<id> * <expr>))  
    A = A * (B + (C * <expr>))  
    A = A * (B + (C * <id>))  
    A = A * (B + (C * A))
```

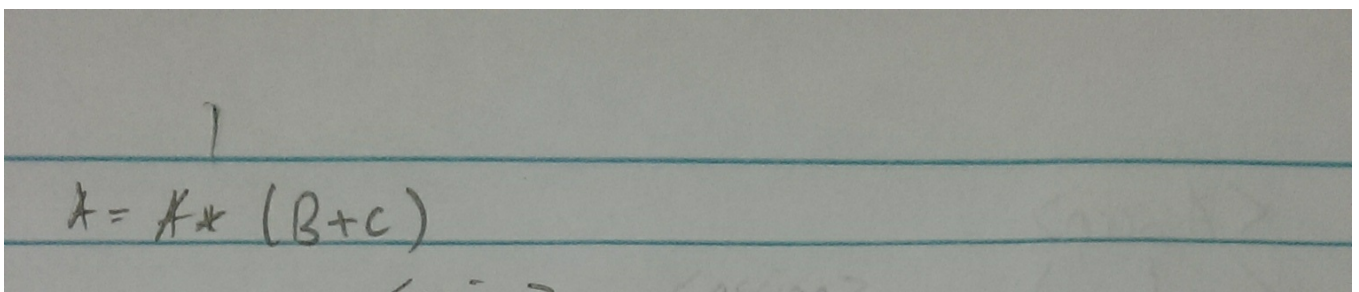




7c-d.

C.

```
<assign> -> <id> = <expr>
      A = <expr>
      A = <term>
      A = <term> * <factor>
      A = <factor> * <factor>
      A = <id> * <factor>
      A = A * <factor>
      A = A * (<expr>)
      A = A * (<expr> + <term>)
      A = A * (<term> + <term>)
      A = A * (<id> + <term>)
      A = A * (B + <term>)
      A = A * (B + <factor>)
      A = A * (B + <id>)
      A = A * (B + C)
```



~~<assign>~~
/ | \

<id> = <expr>

/ |

A

<term>

/ | \

<term> * <factor>

/ | \

<factor>

(<expr>)

/ | \

<id>

<expr>

+

<term>

/

/

/

A

<term>

<factor>

/

/

<factor>

<id>

/

/

<id>

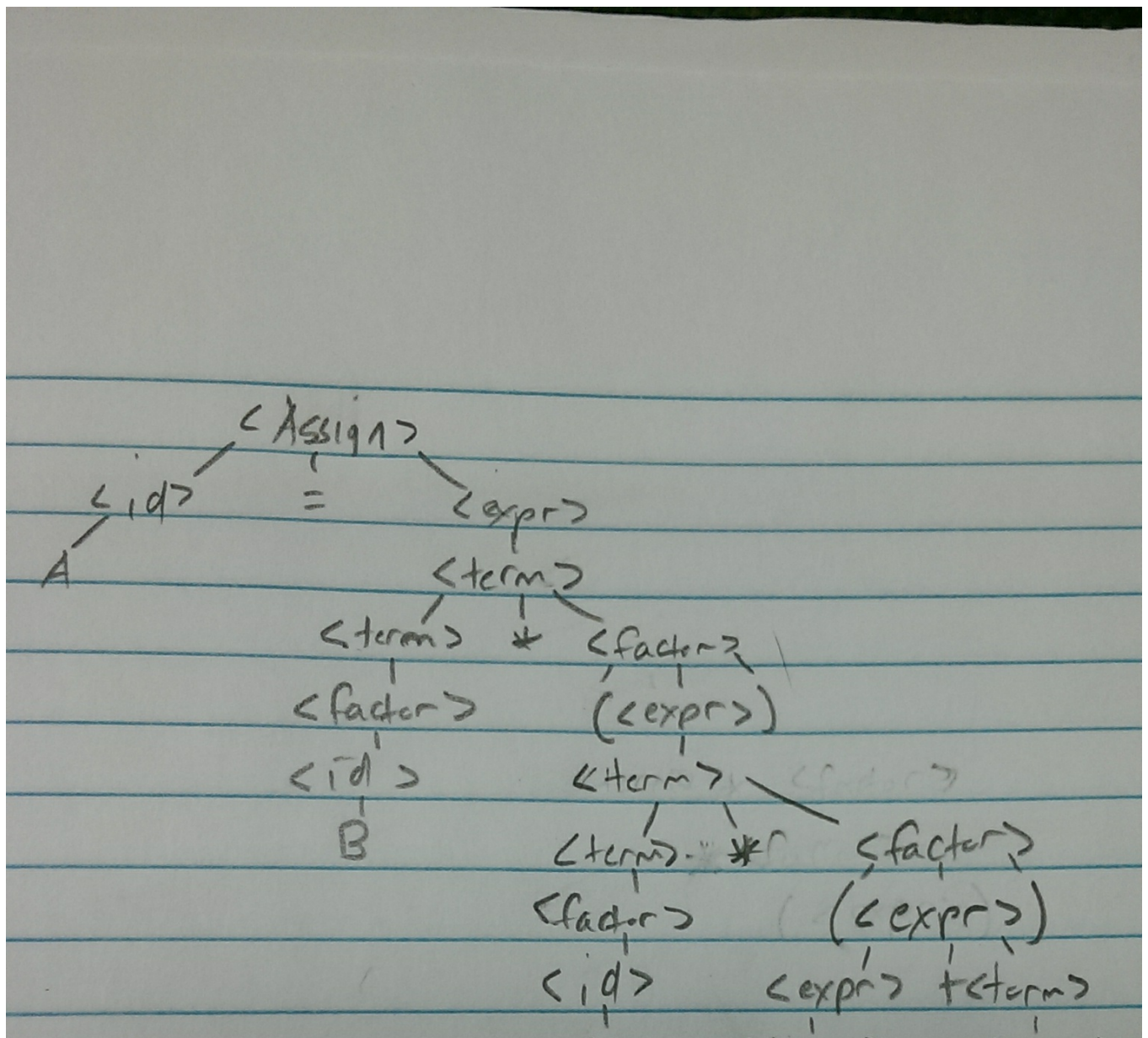
C

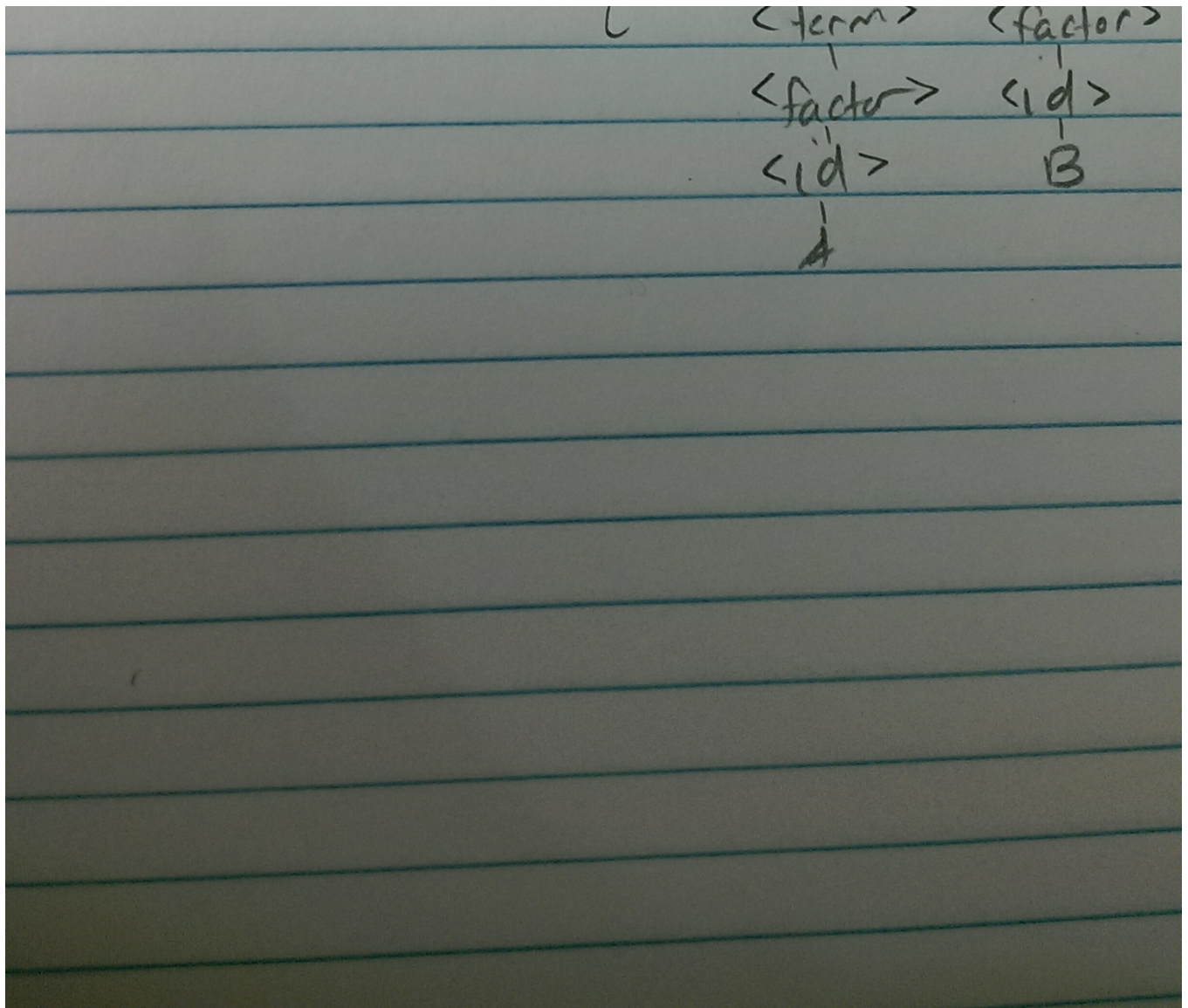
/

B

D.

```
<assign> -> <id> = <expr>
A = <expr>
A = <term>
A = <term> * <factor>
A = <factor> * <factor>
A = <id> * <factor>
A = A * <factor>
A = A * (<expr>)
A = A * (<term>)
A = A * (<term> * <factor>)
A = A * (<factor> * <factor>)
A = A * (<id> * <factor>)
A = A * (C * <factor>)
A = A * (C * (<expr>))
A = A * (C * (<expr> + <term>))
A = A * (C * (<term> + <term>))
A = A * (C * (<factor> + <term>))
A = A * (C * (<id> + <term>))
A = A * (C * (A + <term>))
A = A * (C * (A + <factor>))
A = A * (C * (A + <id>))
A = A * (C * (A + B))
```





11c-d.

C - NO

D - YES