“Worksheet” sample solutions.

Exercise 1

a.

```
<exp>       ::=   <exp> + <mulexp> | <exp> - <mulexp> | <mulexp>
<mulexp>    ::=   <mulexp> * <rootexp> | <mulexp> / <rootexp> | <rootexp>
<rootexp>   ::=   ( <exp> ) | a | b | c
```

b.

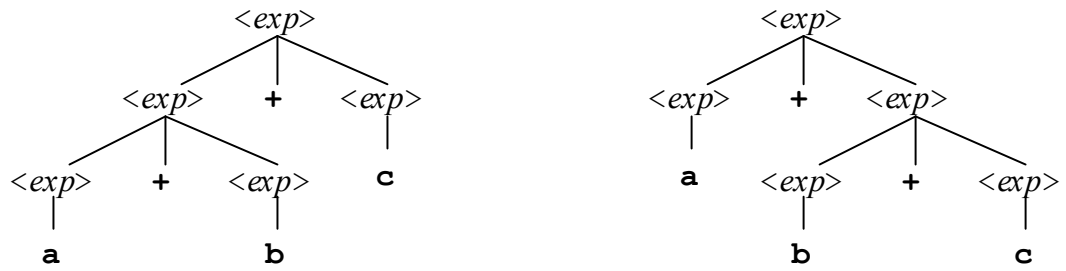
```
<exp>       ::=   <exp> + <remexp> | <exp> - <remexp> | <remexp>
<remexp>    ::=   <remexp> % <mulexp> | <mulexp>
<mulexp>    ::=   <mulexp> * <rootexp> | <mulexp> / <rootexp> | <rootexp>
<rootexp>   ::=   ( <exp> ) | a | b | c
```

c.

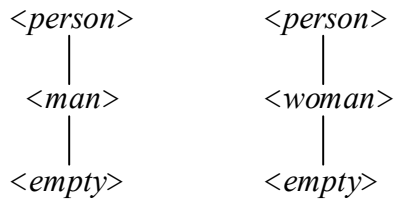
```
<exp>             ::=   <addexp> = <exp> | <addexp>
<addexp>    ::=   <addexp> + <remexp> | <addexp> - <remexp> | <remexp>
<remexp>    ::=   <remexp> % <mulexp> | <mulexp>
<mulexp>    ::=   <mulexp> * <rootexp> | <mulexp> / <rootexp> | <rootexp>
<rootexp>   ::=   ( <exp> ) | a | b | c
```

Exercise 3

a.



b.



c.

( ) ( ) ( ) or **( ) (** ( ) ( ) **) ( )** or (**( ) (** ( ) **) ( )**) or any others with three or more consecutive pairs.