

2.2: **2.2.** Which of these are well-formed lists? That is, which ones have properly balanced parentheses?

(A B (C) :not well formed lists.

((A) (B)) well formed lists

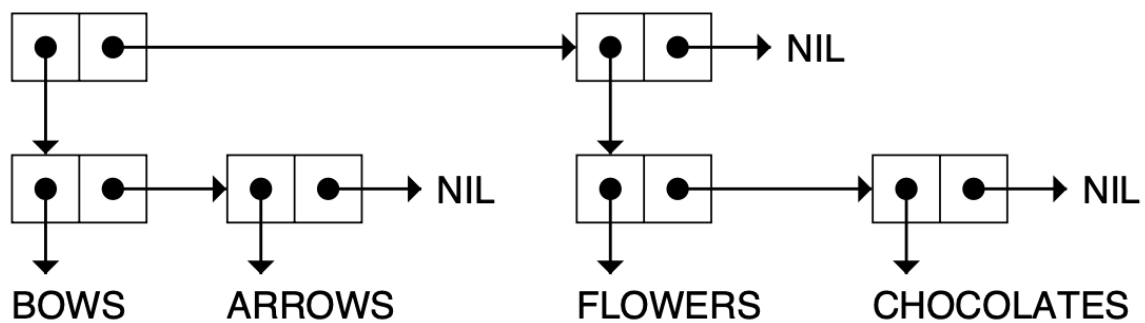
A B)(C D) : not well formed lists

(A (B (C)) : not well formed lists

(A (B (C))) : Well formed lists

((((A) (B)) (C))): well formed lists

2.4 What is the parenthesis notation for this cons cell structure?



((BOWS ARROWS)(FLOWERS CHOCOLATES))

2.6. Match each list on the left with a corresponding list on the right by substituting NIL for () wherever possible. Pay careful attention to levels of parenthesization.

() ((NIL))

((()) NIL

((())) (NIL)

(()) (NIL (NIL))
((()) (NIL NIL)

ANSWER: () NIL
 () (NIL)
 (()) ((NIL))
 (()) (NIL NIL)
 ((())) (NIL (NIL))

2.13. Write down tables similar to the one above to illustrate how to get to each word in the list (((FUN)) (IN THE) (SUN)).

FUN CAAAR
IN CAADR
THE CADADR
SUN CADDR

2.15. Using the list ((A B) (C D) (E F)), fill in the missing parts of this table.

Function Result

CAR (A B)

CDDR __ (E F) __

CADR __ (C D) __

CDAR __ (B) __

_ CADDRAR ____ B

CDDAR _ B ____

_ CAAR ____ A

CDADDR _ E ____

__CDADDR__

F