3.1

NOT (EQUAL 3 (ABS -3)) => NIL

3.2

(/ (+8 12) 2) = 10

3.3

(+(*3 3) (*4 4)) = 25

3.7

(DEFUN MILES-PER-GALLON (INITIAL-ODOMETER-READING FINAL-ODOMETER-READING GALLONS-CONSUMED) (/ (- FINAL-ODOMETER-READING INITIAL-ODOMETER-READING) GALLONS-CONSUMED))

(MILES-PER-GALLON 1000 1500 20) = 25

3.10

(third '(the quick brown fox))
(list 2 'and 2 'is 4)
(+ 1 (length (list t t t t)))
(cons 'patrick '(seymour marvin))
(cons 'patrick (list 'seymour 'marvin))

3.20

a. (mystery '(dancing bear))
(bear dancing)

b. **(mystery 'dancing 'bear)**
Too many arguments => error (may convert to (list 'dancing 'bear)

c. (mystery '(zowie))
(nil zowie)

d. (mystery (list 'first 'second))

(second first)

3.21

1. (defun speak (x y) (list 'all 'x 'is 'y))

error because no variable is assigned

2. (defun speak (x) (y) (list 'all x 'is y))

error because adding something other than plain, unadorned symbols in the function's argument list.

3. (defun speak ((x) (y)) (list all 'x is 'y))

error because put something other than plain, unadorned symbols in the function's argument list, and the x and y is having extra ' while the all and is is missing '

3.25

a. (list 'cons t nil)

(cons t nil)

b. (eval (list 'cons t nil))

(t)

c. (eval (eval (list 'cons t nil)))

Error because the eval function tries to evaluate (t) as a fuction call, which is invalid.

d. (apply #'cons '(t nil))

(t)

e. (eval nil)

Nil

f. (list 'eval nil)

'(eval nil)

g. (eval (list 'eval nil))

Nil