#lang racket

(define step-into-list

(lambda (s sexp)

(if (symbol? sexp)

(if (eqv? sexp s) 1 0)

(count-occurrences s sexp))))

(define count-occurrences

(lambda (s slist)

(if (null? slist)

0

(+ (step-into-list s (car slist))

(count-occurrences s (cdr slist))))))