#lang racket

(define (atom? block)

(and (not (null? block)) (not (pair? block))))

(define (timesdepth\* x y)

(cond((null? y) '())

((atom? (car y)) (cons (\* (car y) x) (timesdepth\* x (cdr y))))

((atom? y) (\* second x))

(else (cons (timesdepth\* (+ 1 x) (car y)) (timesdepth\* x (cdr y))))))