Quiz 0.3a

1. (3 points) The procedure first-letters below is missing a base case. What will happen if I call (first-letters ‘(this is a sentence)) ? You must explain your reasoning – only 1 point will be given for the correct answer, the remaining 2 points are for the explanation.

(define (first-letters sent)

(sentence (first (first sent)) (first-letters (bf sent))))

1. (3 points) Write a procedure to reverse a sentence. **We will cut points for bad style!**

> (reverse ‘(anne i vote more cars race rome to vienna))

(vienna to rome race cars more vote i anne)

1. (4 points) Write a procedure progressive-squares? that takes a sentence of numbers as its argument. It should return #t if each number (other than the first) is the square of the number before it. **We will cut points for bad style!**

> (progressive-squares? '(3 9 81 6561))

#t

> (progressive-squares? '())

#t

> (progressive-squares? '(6))

#t

> (progressive-squares? '(25 36 49 64))

#f

(define (square x) (\* x x))