(defun listnth(N L)

(if (null L)

nil

(if (zerop N)

(first L)

(listnth (- N 1) (cdr L)))))

LISTNTH

[7]> (listnth 1 '(1 2 3 4))

2

[8]> (listnth 1 '())

NIL

[9]> (listnth 1 '(0))

NIL

[10]> (listnth 0 '(1))

1

[11]>

[8]> (defun factorial(n)

(if (= n 0)

1

(\* n (factorial(- n 1)))))

FACTORIAL

[9]> (factorial 3)

6

[10]> (factorial 10)

3628800

[11]> (factorial 0)

1