**Racket**

There are 3 basic data types:  
 atom: any identifier or symbol, we use signle quote to identify 🡪 ‘a  
 list: a linked list 🡪 ‘(a b c d e)  
 numbers: can be integer, fraction, or floating point

Scheme uses prefix function calls:  
 (+ 5 6) 🡪 function call  
 ‘(+ 5 6) 🡪 list of 3 elements

Functions

(lambda (x y) 🡨 parameters  
 (+ x y)) 🡨 function

((lambda (x y) (+ x y)) 10 20)  
 =30

To bind a constant to a name, use *define* (define sum (lambda (x y) (+ x y)))  
 (sum 4 5)  
 = 9

;; determines the length of a list

(define len  
 (lambda (lis)  
 (if (null? lis)  
 0  
 (+ 1 (len (cdr lis))))))