

```
;; Notkun: (sum x)
;; Fyrir: x=(x1 x2 ... xN) er listi talna.
;; x má vera tómur.
;; Gildi: Summa talnanna, þ.e.  $x_1+x_2+\dots+x_N$ .
```

```
(define (sum x)
  (if(null? x)
    0
    (+ (car x) (sum(cdr x))))
```

```
;; Notkun: (squaresum x s)
;; Fyrir: x=(x1 x2 ... xN) er listi talna.
;; x má vera tómur.
;; s er tala.
;; Gildi: Summan  $s+x_1^2+x_2^2+\dots+x_N^2$ .
```

```
(define (squaresum x s)
  (if(null? x)
    s
    (if(null? (cdr x))
      (+(* (car x) (car x))s)
      (+(* (car x) (car x)) (squaresum (cdr x) s))
    )
  )
)
```

```
;; Notkun: ((incall y) x)
;; Fyrir: y er tala, x=(x1 x2 ... xN) er listi talna.
;; Gildi: Talnalistinn (y+x1 y+x2 ... y+xN).
```

```
(define (incall y)
  (lambda (x)
    (if(null? (cdr x))
      (cons (+ (car x) y) '())
      (cons(+ (car x) y) ((incall y) (cdr x))))))
```