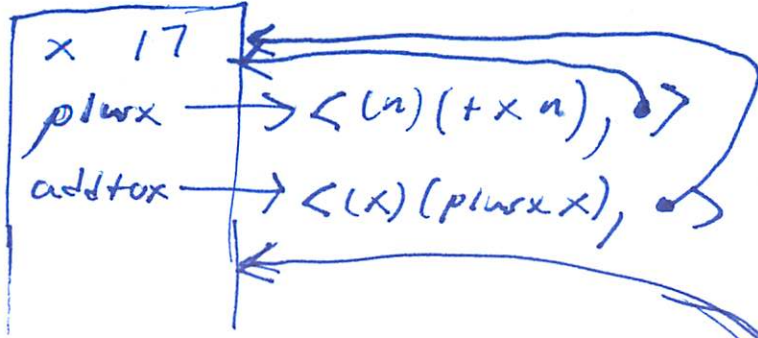


global env

$\langle \text{params} | \text{exp}, \text{env} \rangle$



$((\text{define } (f \text{ args}) \text{ exp}))$

$\equiv (\text{define } f (\text{lambda } (\text{args}) \text{ exp}))$

(define plus

(lambda (n) (+ x n)))

(define addtox

(lambda (x) (plus x)))

(addtox 3)

\Downarrow

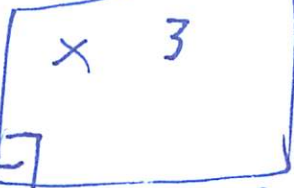
$\langle (x) (\text{plus } x), \bullet \rangle 3$

eval

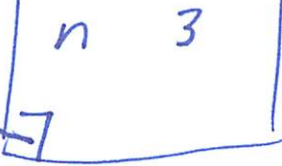
(plus x) in env

$\langle (n) (+ x n), \bullet \rangle 3$

addtox env



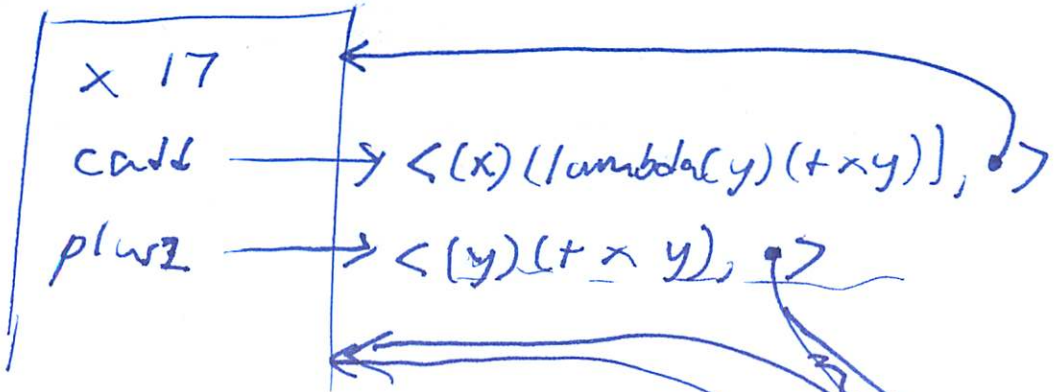
plus



(+ x n)

(+ 17 3) \Rightarrow 20

global env



```
(define cadd
  (lambda (x)
    (lambda (y) (+ x y))))
```

```
(define plus2
  (cadd 2))
  ↓↓
  <(x) (lambda (y) (+ x y)), z>
```

```
(plus2 3)
  ↓↓
  <(y) (+ x y), 3>
```

"plus2 object"

