

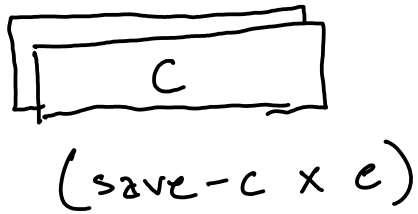
✓ store C

⇒

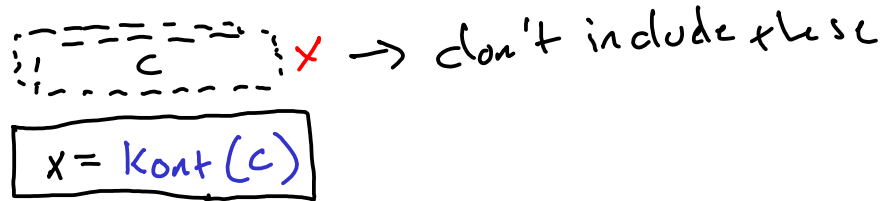
(save-c x e)

kont(c)

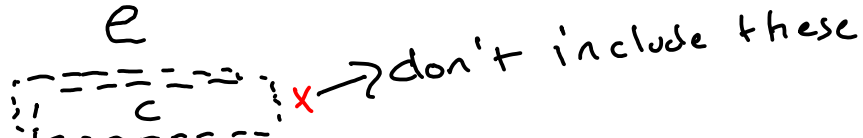
(restore-c e e)



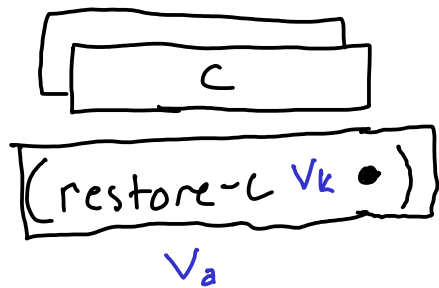
⇒



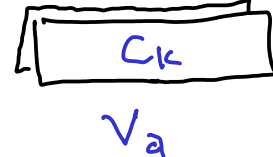
e



$V_k = \text{kont}(c_k)$



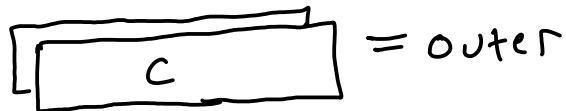
⇒



$(\text{try } e_b \text{ x } e_c) \rightsquigarrow (\text{save-c outer}$
 $(\text{let } (x \text{ (save-c throw-here}$
 $(\text{restore-c outer } e_b)))$
 $(\text{restore-c outer } e_c)))$

$(\text{throw } e) \rightsquigarrow (\text{restore-c throw-here } e)$

if e_b throws,
this never runs

 = outer
 $(\text{try } e_b \text{ x } e_c)$

(+ 7

(try (+ 1 (throw 2)) n (+ 3 n))

(+ 7

(save-c outer

(let (n (save-c throw (restore outer (+ 1 (restore-c throw 2))))))

(restore outer (+ 3 n))))

(+ 7 •)

(save-c outer ...)

=>

outer = v_{out}

(let (n ...) ...)

v_{out} = kont ((+ 7 •))

=>

outer = v_{out}

(let (n •) ...)

(save-c throw ...)

=>

throw = v_t

(restore outer ...)

v_t = kont ((outer = v_{out}) (let (n •) ...))

⇒
throw = vt
(restore Vout •)
(+ 1 (restore-c throw 2))

⇒
throw = vt
(restore Vout •)
(+ 1 •)
(restore-c vt •)
2

⇒
outer = Vout
(let (n •) ...)
2

⇒
outer = Vout
n = 2
(restore outer (+ 3 n))

⇒
outer = Vout
n = 2
(restore Vout •)
5

⇒
(+ 7 •)
5

⇒ 12

... (+ 7 (try (+ 2 3) n (+ 1 n)))

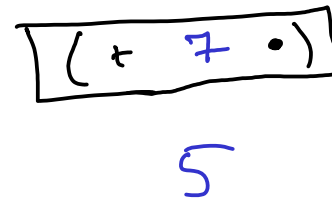
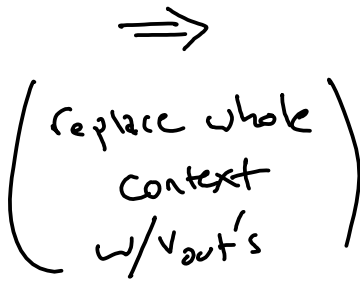
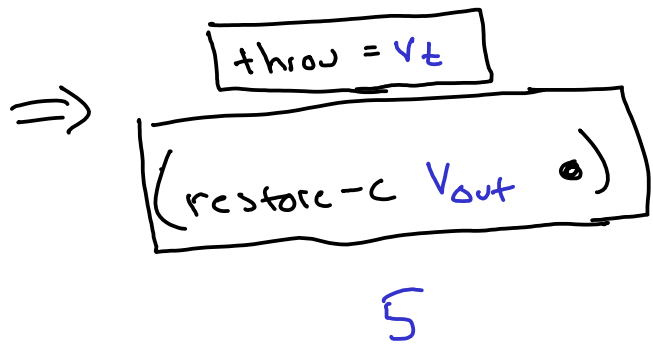
(+ 7 (save-c outer
 (let (n (save-c throw (restore-c outer (+ 2 3))))
 (+ 1 n))))))

$\boxed{(+ 7 \bullet)}$
(save-c outer ...)

\Rightarrow $\boxed{\text{outer} = \text{Vout}}$ $\text{Vout} = \text{kont}(\boxed{(+ 7 \bullet)})$
(let (n (save-c throw ...))
 (+ 1 n))

\Rightarrow $\boxed{\text{outer} = \text{Vout}}$
 $\boxed{(\text{let} (n \bullet) \dots)}$
(save-c throw ...)

\Rightarrow $\boxed{\text{throw} = \text{Vt}}$ $\text{Vt} = \text{kont}(\boxed{\begin{array}{l} \text{outer} = \text{Vout} \\ (\text{let} (n \bullet) \dots) \end{array}})$
(restore-c outer (+ 2 3))



```
fun save-c(f): call-cc(f) end
fun restore-c(k, v): k(v) end

fun find-in-list(l :: List, n :: Number):
  save-c(lam(return-here):
    for each(elt from l):
      print(elt)
      when elt == n:
        restore-c(return-here, true)
      end
    end
    restore-c(return-here, false)
  end)
end
```

