sqrt-iter walk throgh

(sqrt 9)

                   guess   x

↳ (sqrt-iter 1.0 9)

                                   guess   x

↳ if (good-enough? 1.0 9) → #f

(square guess) → 1.0
(1.0 − 9) → −8.0
(abs −8.0) → 8.0
8.0 < 0.001 → #f

#f

                                                 guess   x

(sqrt-iter (improve 1.0 9) 9)

                                    guess   x

                           x   y

(average 1.0 ($9/1$))

(1.0 + 9.0) / 2 = 5

(sqrt-iter 5 9)

         guess
        for 2nd iteration

2nd iteration

                                  guess

(if good-enough? 5 9)

$\downarrow$

(square 5) $\rightarrow$ 25

(25 - 9) $\rightarrow$ 16

16 < 0.001 $\rightarrow$ #f

(sqrt-iter (improve 5 9) 9)

$\downarrow$

(average 5 (9/5))

$\downarrow$

(5 + 9/5)/2 $\rightarrow$ 3.4

(sqrt-iter 3.4 9)   �✗ 3rd Iteration ✗

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