

cw14\_pr1.rkt (define ...)▼

1: cw14\_pr2.rkt

```
1 #lang scheme
2 (define (sum-odd-numbers lst)
3   (define (odd? n) (not (= (modulo n 2) 0)))
4   (define odd-numbers (filter odd? lst))
5   (apply + odd-numbers))
6
7
8 (define (run-tests)
9   (display "Test for: 1 2 3 4 5 6 7 8 9 10: ")
10  (newline)
11  (display (sum-odd-numbers '(1 2 3 4 5 6 7 8 9 10)))
12  (newline) (newline)
13  (display "Other Tests")
14  (newline)
15  (display "Test 1: 11 12 13 14 15")
16  (newline)
17  (display (sum-odd-numbers '(11 12 13 14 15)))
18  (newline)
19  (display "Test 2: { }")
20  (newline)
21  (display (sum-odd-numbers '()))
22  (newline)
23  (display "Test 3: 2 4 6 8")
24  (newline)
25  (display (sum-odd-numbers '(2 4 6 8)))
26  (newline)
27 )
28
29 (run-tests)
```

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Language: **scheme**, with **debugging**; memory limit: 128 MB.

Test for: 1 2 3 4 5 6 7 8 9 10:  
25

Other Tests  
Test 1: 11 12 13 14 15  
39  
Test 2: { }  
0  
Test 3: 2 4 6 8  
0  
>

cw14\_pr2.rkt

cw14\_pr2.rkt ▾ (define ...) ▾

```
1 #lang scheme
2
3 (define (area-of-ring outer-radius thickness)
4   (let* ((inner-radius (- outer-radius thickness))
5         (pi 3.14159)
6         (area (* pi (- (* outer-radius outer-radius) (* inner-radius inner-radius)))))
7     area))
8
9 (define (round-to-2-decimals num)
10   (round (* num 100.0)))
11
12 (display "Enter the outer radius: ")
13 (define outer-radius (read))
14 (display "Enter the thickness: ")
15 (define thickness (read))
16
17
18 (define area (area-of-ring outer-radius thickness))
19 (define rounded-area (round-to-2-decimals area))
20 (display "The area of the circular ring is: ")
21 (display (/ rounded-area 100.0))
22 (newline)
```

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Language: **scheme**, with **debugging**; memory limit: 128 MB.  
Enter the outer radius: 5  
Enter the thickness: 1  
The area of the circular ring is: 28.27  
> |