

Name: \_\_\_\_\_

## Quiz #1

1. Given the following list, tell me what the value of these expressions would be.

```
(define lst '(1 2 (3 (4 5)) (6 7)))
```

a. (car lst)

**1**

b. (caddr lst)

**(3 (4 5))**

c. (cons 9 (cddddr lst))

**(9 (6 7))**

2. Write a function that takes a list and returns a list containing only the elements of the original list that were numbers.

```
(define (num-only lst)
  (cond
    ((null? lst) '())
    ((number? (car lst)) (cons (car lst) (num-only (cdr lst))))
    (else (num-only (cdr lst)))))
```

Extra Credit: Write a function that takes a list and returns a list where every element of the original list has been doubled.

```
(define (double-list lst)
  (if (null? lst)
      '()
      (cons (* 2 (car lst)) (double (cdr lst)))))
```