Clicker Questions
February 6

What is (A '(1 2 3) '(A B C)) ??

```
(define A
        (lambda (lat1 lat2)
                (cond
                        [(null? lat1) lat2]
                        [else (cons (car lat1) (A (cdr lat1) lat2))])))
```

A) It gives an error
B) (1 2 3 A B C)
C) (3 2 1 A B C)
D) (A B C)

Answer: B) (1 2 3 A B C)

Procedure A is called "append". It pushes 2 lists together:

(append '(1 2 3) '(4 5 6)) is (1 2 3 4 5 6)

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

What is (f 3 4)?

A) An error
B) 3
C) 4
d) 7

A) An error

f is a function of 1 variable; (f 3 4) doesn't make sense

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

Somehow f is adding x and y. How do we call it with arguments 3 and 4 to get answer 7?

A) (f 3 4)
B) ((f 3 4))
C) (f '(3 4))
D) ((f 3) 4)

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

Answer: D) ((f 3) 4)

(f 3) returns a procedure; when you call that procedure with a value, it adds 3 to that value and returns the result. Perhaps more legibly we could say

```
(define add3 (f 3))
(add3 4)
```