

8. Given these Scheme function definitions:

```
(define double (x) (+ x x))  
(define square (x) (* x x))  
(define inc (x) (+ x 1))
```

Determine the output produced by each Scheme code fragment below. **[15 points]**

a. (((lambda (f) ((lambda (g) (lambda (h) (f (g (h 4)))))) double)) square) inc)

b. (((lambda (f) (lambda (g) ((lambda (h) (f (g (h 4)))))) double))) square) inc)

c. (((((lambda (f) (lambda (g) (lambda (h) (f (g (h 4))))))) double) square) inc)

d. ((lambda (f) ((lambda (g) ((lambda (h) (f (g (h 4)))) double)) square)) inc)

e. ((lambda (f) (((lambda (g) (lambda (h) (f (g (h 4)))))) double) square)) inc)
