# MASSACHUSETTS INSTITUTE OF TECHNOLOGY 

Department of Electrical Engineering and Computer Science
6.001 Structure and Interpretation of Computer Programs

Spring, 2007

## Recitation 7, Friday March 2

## Higher Order Procedure Notes <br> Dr. Kimberle Koile

1. Using higher order procedures: procedures that return procedures
```
    (* 25)
    (* 2 8)
(define (double n)
    )
(define (make-mult x)
    )
(define double (define triple
) )
```

2. Using higher order procedures: procedures that take procedures as arguments very useful hops: map, filter, (fold-right, fold-left next recitation) examples:
(map double (list $\left.12 \begin{array}{lll}4 & 4\end{array}\right)$ ) $)\left(\begin{array}{llll}2 & 4 & 6 & 8\end{array}\right)$
(filter even? (list 1234 )) => (2 4)
(define (map op items)
(define (filter op items)
