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	Dr. Kimberle Koile	e
1. Using higher order procedures: pro	cedures that return procedures	
(* 2 5) (* 2 8)	(* 3 2) (* 3 4)	
(define (double n)	(define (triple n)	
))	
(define (make-mult x)		
)		
(define double	(define triple	
))	
2. Using higher order procedures: pro	cedures that take procedures as arguments	
very useful hops: map, filter, (fold-	right, fold-left next recitation)	
examples:		
(map double (list 1 2 3 4)) =>	2 4 6 8)	
(filter even? (list 1 2 3 4)) $= (2 4)^{-1}$	•)	
(define (map op items)	(define (filter op items)	