## MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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## **Higher Order Procedure Fold-Right Problems**

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Write the following procedures in terms of fold-right.

```
1. map
 (define (map op seq)
    (fold-right
        (lambda (elt rtn)
           (cons (op elt) rtn))
        ()'
       seq))
2. append
(define (append seq1 seq2)
    (fold-right cons
        seq2 seq1))
3. length
(define (length seq)
   (fold-right
         (lambda (elt rtn)
           (+ 1 rtn))
       0
       seq))
4. reverse
    (define (reverse seq)
      (fold-right (lambda (elt rtn)
             (append rtn (list elt)))
                '()
                seq))
```