# Data Structures II

Theoretical Homework 4

## Question 1



## Question 2

1. Claim:   
   ∴   
   Proof by induction:  
      
    Assume   
      
      
      
      
    for any c such that

## Question 3

7. Claim:   
   ∴   
   Proof by induction:  
      
    Assume   
      
      
      
      
    Choose .