

# Homework 6

RT Hatfield

21 September 2016

1.
  - A. Pre: 1 Post: 12
    - Tree edges: B
  - B. Pre: 2 Post: 11
    - Tree edges: C
  - C. Pre: 3 Post: 10
    - Tree edges: F
  - D. Pre: 13 Post: 18
    - Tree edges: G
  - E. Pre: 5 Post: 6
    - Back edges: A, B
  - F. Pre: 4 Post: 9
    - Tree edges: E, I
  - G. Pre: 14 Post: 17
    - Tree edges: H
  - H. Pre: 15 Post: 16
    - Back edges: G
  - I. Pre: 7 Post: 8
2.
  - – Ordering:
    - \* A. Pre: 1 Post: 16
    - \* B. Pre: 2 Post: 15
    - \* C. Pre: 3 Post: 14
    - \* D. Pre: 4 Post: 13
    - \* E. Pre: 8 Post: 9
    - \* F. Pre: 7 Post: 10
    - \* G. Pre: 6 Post: 11
    - \* H. Pre: 5 Post: 12
  - Tree edges:  $AB, BC, CD, DH, HG, GF, FE$
  - Forward edges:  $AF, BE$

- Back edges:  $DB, FG, EG, ED$
- Cross edges: There don't appear to be any
- – Ordering:
  - \* A. Pre: 1 Post: 16
  - \* B. Pre: 2 Post: 11
  - \* C. Pre: 4 Post: 5
  - \* D. Pre: 6 Post: 9
  - \* E. Pre: 7 Post: 8
  - \* F. Pre: 3 Post: 10
  - \* G. Pre: 13 Post: 14
  - \* H. Pre: 12 Post: 15
- Tree edges:  $AB, BF, FC, FD, DE, AH, HG$
- Forward edges:  $FE$
- Back edges:  $CB, GA$
- Cross edges:  $GB, GF, DC$