

CSci 421
Introduction to Algorithms
Homework Assignment 5
Due: Tuesday, 3 Aug 2004

Summer 2004

July 29, 2004

Reading in Chapter 7: 7.1–7.4, 7.6 (although I gave a different algorithm in lecture), 7.9–7.11, 7.13.

Homework:

1. 7.16. You may use *increasing* DFS numbers and LOW values (as in lecture) rather than decreasing numbers/HIGH values (as in text) if you prefer. Say which you're doing. *Note: Fig. 7.45 shows increasing DFS numbers.*
2. 7.17. Is the same true if all cross edges are also removed? Prove it.
3. 7.38.
4. (Extra Credit) 7.91. Assume every vertex in G is incident to at least one edge.