

Discrete Mathematics with Applications

F02 – Lecture 14

Lecture, May 6

We will finish section 7.2 and cover sections 7.3, 7.4 (though we will skip the subsections on “paths and isomorphisms” and “counting paths between vertices”) and most of 7.5.

Lecture, May 14, 8:30 in U49B

We will finish section 7.5 and cover section 7.7 and possibly 7.8.

Lecture, May 27

Joan will finish section 7.8 and Klaus will cover Huffman codes, from the notes.

Review session, May 28

Please come with questions, though we will have a couple sample problems to discuss.

Problems to be discussed on May 21

- **Problems from Section 7.5:** Do problems 16, 20, 22, 38a, 55, 64, 68, and 70. For 64 and 68, see the note before problem 64.

- Read about Petersen on page 489 and notice the graph in problem 56. When looking for a graph which might be a counterexample to a conjecture, always consider the Petersen graph.
- **Problems from Section 7.7:** Do problems 10, 16, 17 and 20.
- Suppose G is a connected, simple, planar graph. Show that G has at least one vertex with degree at most 5.