# Math 6 Final Review

#### Sections Covered on Exam

Chapter 5: 5.1 - 5.7

Chapter 12: 12.1 – 12.5

Chapter 2: 2.3

Chapter 13: 13.1-13.4, 13.5(through example 5), 13.6 (through example 4)

Chapter 9: 9.1, 9.2, Class Notes on determining optimal mixed strategies.

Voting Handout and Bob Norman's Notes

## Sources for Practice Problems

## Chapter 5:

- 5.1:1-51 odd
- 5.2: 1 49, 55 59 odd
- 5.3: 1 53 odd
- 5.4: 1 59 odd
- 5.5: 1 73 odd
- 5.6: 1 43 odd
- 5.7: 1 47 odd
- 1 16 in Fundamental Concepts
- 1-63 in Supplementary Problems
- 1-14 of Chapter Test

#### Chapter 12:

- 12.1: 1 19 odd
- 12.2: 1 29 odd
- 12.3: 1 41 odd
- 12.4: 1 17 odd
- 12.5: 1 19 odd
- 1-4, 6-10, 13, 14 in Fundamental Concepts
- 1-9, 12, 13, 16-19 in Supplementary Problems
- 1 4, 6 10, 12 in Chapter Test

### Section 2.3: 7 - 29 odd

#### Chapter 13:

- 13.1: all odds
- 13.2: all odds
- 13.3: all odds
- 13.4: all odds
- 13.5: 1a, 1b, 3, 5a, 5b, 7, 9, 11a, 11b, 11c, 13
- 13.6: 1, 9, 11, 13
- 1 20 in Fundamental Concepts
- 1 14, 18, 19 in Supplementary Problems
- 1 7 Chapter Test

## Chapter 9:

9.1: all odds
9.2: all odds
9.3: 1, 3, 5, 11
1 - 8 in Fundamental Concepts
1 - 10, 13 in Supplementary Problems
1 - 7 Chapter Test

Voting Handout – all exercises not assigned for homework.

### *Note:*

- (1) Some of the above problems are longer or more difficult than what you will be expected to do on the exam.
- (2) The solutions to all of the problems in the textbook listed above can be found in the back of the text.

# You should know the following logical equivalences and logical implications:

```
Section 12.4, Table 1 (page 585):
1, 2(a, b, c), 3(a, b), 4(a, b), 5(a, b), 6(a, b, c, d), 7(a, b), 8, 9, 10(a), 11
Section 12.4, Table 2 (page 588):
1, 2, 3, 5, 6
```

# Important Graph Theory Results:

Graph Properties in Section 13.1

All theorems pertaining to Euler paths and cycles in graphs and digraphs (13.2 & 13.4) Fleury Algorithm for finding an Euler cycle (13.2)

Algorithm for finding a minimal spanning tree (13.3).