Review for Math 2300 Quiz 2, Spring 2018

Chapter 4, Sections: 1, 2, 3, 6 (Contrapositive only)

Chapter 5, Sections: 1, 2, 3

You may bring one the PMI handout. You may write on it in your own handwriting. This is intended as a guide and not meant to exclude anything unless explicitly stated.

Chapter 4:

Definitions

Even, odd, prime, composite, rational, integer division

Proofs

Direct and Contrapositive Counterexamples Covered in Sections 1, 2, 3, 6 You may NOT use proof by contradiction

Chapter 5:

Define

Sequence Recurrence Recursive definition

Sequences

Find formula, given the terms (must specify index set) Write recursive definition, given the terms Formulas for arithmetic and geometric finite sums

 $\sum_{i=1}^{n} i \qquad \qquad \sum_{i=0}^{n} r^{i}$

Sequences that you should know and recognize n! Towers of Hanoi Fibonacci

Induction proofs (5 numbered steps) Formulas Divisibility Inequalities Formula, given recursive definition of a sequence