

Math 3120

Chapters 5 Exam Review

Memorize: finite, infinite, denumerable, countable, uncountable, aleph not, c

Match: Comparability (trichotomy), Cantor's, CSB, continuum hypothesis, Axiom of Choice

Know: equivalence relation, equivalent sets, Theorem 5.29, example pg 251 (sandwiching)

Know the cardinalities of empty set, N_k , N , R , $N \times N$, Q , $P(N)$, and $R \times R$.

Chapters 5 Exam Extra credit review problems (15 points, due Monday Dec 4 in class)

A. Prove \approx is an equivalence relation on sets. I suggest using Theorem 4.12 (pg 203).

5.1: 3b, 5bfk, 6b, 12

5.2: 1bf, 3, 5bc

5.3: 10a

5.4: 3, 8c, 15c

Good luck!