Midterm Topics

Math 105

Summer 2020

• Arguments

- Prove validity/invalidity with a Venn diagram
- Convert words to a symbolic expression and vice versa
- Construct a truth table for a symbolic expression
- Use De Morgan's laws on logical expressions
- Prove validity/invalidity with a truth table

• Sets

- Convert a description of a set to set-builder notation and vice versa
- Take the union, intersection, and complement of sets
- Determine if one set is a subset of another
- Find the cardinality of a set
- Find the cardinality of a union given the cardinality of the individual sets and their intersection
- Apply De Morgan's laws to sets