Math 2001 Spring 2020 - Review

1. **Sets.**
   (1) Constructions: set builder notation, Cartesian product (1.2), subsets (1.3), power set (1.4), union, intersection, difference (1.5), complement (1.6), infinite unions and intersections (1.8)
   (2) Proving identities for sets: laws of set operations, Venn diagrams (1.7), proving $a \in A$, $A \subseteq B$, $A = B$ (see also 8.1-8.3).

2. **Logic.**
   (1) Statements: logical connectives (2.2), if (2.3), truth tables (2.5), logical equivalence (2.6), iff (2.4)
   (2) Quantifiers (2.7): negating quantified statements, checking whether quantified statement is true (proof for universally quantified statement, example for existentially quantified statement)