MATHS 255 Class Notes Chapter 3

Non-axiomatic approach. For a more formal treatment, see Appendix A (p.127).

treatment, see Appendix A (p.127).
Undefined terms: Set Element ∈
Basic notations:
Empty set: ∅
Subset: ⊆
Proper subset:
Equality of sets: =
Description of set by a statement: $\{x \in U: P(x)\}.$
Basic operations
Union: ∪
Intersection: ∩
[Omit Indexed sets, at least for now: Omit §§ 3.2.3 5, 3.2.8, 3,2.11]
Complement of a set: A^c , A_U^c .
Difference: $A \setminus B$.
Power set: $P(A)$.