

# COMP9020 Week 9 Recap

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- Combinatorics:
  - Disjoint sets, inclusion-exclusion rule
  - Cartesian products, counting sequences
  - Permutations and Combinations
  - Sequences with/without replacement and with/without ordering, Balls in boxes
- Probability
  - Sample space
  - Probability distribution, uniform probability
  - Combining Events
    - Events from the same set of outcomes
    - Events involving different sets of outcomes
  - Independent events

# Need to know for this course

- Counting based on basic set operations (union, intersection, etc)
- Four different types of sequences, their notation, and how to count them (i.e. formulas)
- Basic probability calculations