

Baseline Theorems for Combinatorics HT19

- Pidgeon hole principle (Theorem 2.1.14)
- Calculation of the Euler phi-function (Theorem 3.1.7)
- Multiplicativity of the rook polynomial (Proposition 4.1.4)
- The summation operator sums (Proposition 5.4.2)
- Existence and uniqueness of solutions to 1st order, linear, homogeneous recurrence relations (Proposition 6.1.3)
- Every walk of minimal length is a path (Proposition 7.1.12)
- Degree formula (Proposition 7.3.3)
- Every finite, connected graph has a spanning tree (Proposition 8.1.4)
- The value of a flow can be calculated over every cut (Lemma 9.4.8)
- Being parallel is an equivalence relation on lines (Proposition 10.1.6)