Lemma 1.5.1 – Handshaking Lemma

Lemma 1.5.2 – Even number of vertices of odd degree in any graph

Lemma 2.1.1 – Bridges are edges not in any cycle

Proposition 2.1.2 – Classification of trees

Proposition 2.1.3 – Connected graphs have spanning trees

Lemma 2.2.1 – Breadth first search trees preserve distances from the root

Lemma 2.2.2 – Classification of bipartite graphs

Corollary 2.10.1 – $\kappa(G) \leq \lambda(G) \leq \delta(G)$

Lemma 3.1.1 – $\alpha(G) + \beta(G) = |V(G)|$

Lemma 3.1.2 – Gallai's Lemma

Corollary 3.2.2 – Regular bipartite graphs have a 1-factorization

Proposition 4.3.2 – Coloring d-degenerate graphs

Proposition 5.3.1 – Stereographic projection

Theorem 2.3.1 – Eulerian Graphs

Theorem 2.7.1 – Menger's Theorem, Vertex Form (no proof)

Theorem 2.7.1 – Menger's Theorem, Edge Form (no proof)

Theorem 3.2.1 – Hall's Theorem (no proof)

Theorem 3.4.1 – Tutte's 1-Factor Theorem

Theorem 3.4.2 – Petersen's Theorem

Theorem 3.6.1 – Berge's Theorem

Theorem 4.1.1 – König's Theorem

Theorem 4.2.1 – Vizing's Theorem (no proof)

Theorem 4.3.1 – Brooks' Theorem (no proof)

Theorem 5.1.1 – Face Handshaking Lemma (no proof)

Theorem 5.1.2 – Euler's Formula

Theorem 5.1.3

Theorem 5.2.1 – The Five Color Theorem

Theorem 5.3.2 – Fary's Theorem

Theorem 6.1.1 – Mantel's Theorem