

Chapter 3: Convexity

- Theorem 3.8: Carathéodory's Theorem
- Theorem 3.26: The Separation Theorem
- Theorem 3.34: Farkas' Lemma. NOTE: Use statement and proof of Theorem 11.11!
- Theorem 3.44(a): Characterization of convex functions in C^1

Chapter 4: Primal optimality conditions

- Theorem 4.3: The Fundamental Theorem of global optimality
- Theorem 4.5: Weierstrass' Theorem
- Theorem 4.11: Necessary optimality conditions, C^1 case
- Theorem 4.14: Necessary optimality conditions, C^2 case
- Theorem 4.15: Sufficient optimality conditions, C^2 case
- Theorem 4.16: Necessary and sufficient global optimality conditions
- Theorem 4.21: Necessary and sufficient global optimality conditions

Chapter 6: Primal–dual optimality conditions

- Theorem 6.25: Karush–Kuhn–Tucker conditions
- Theorem 6.33: Karush–Kuhn–Tucker conditions
- Theorem 6.45: Sufficiency of the Karush–Kuhn–Tucker conditions for convex problems

Chapter 7: Lagrangian duality

- Theorem 7.1: Relaxation Theorem
- Theorem 7.4: Weak Duality Theorem
- Theorem 7.6: Global optimality conditions in the absence of a duality gap

Chapter 9: Linear programming models

- Theorem 9.10: Existence and properties of optimal solutions

Chapter 10: The Simplex method

- Theorem 10.10: Finiteness of the Simplex method

Chapter 11: LP duality and sensitivity

- Theorem 11.4: Weak Duality Theorem
- Theorem 11.6: Strong Duality Theorem
- Theorem 11.10: Farkas' Lemma
- Theorem 11.11: Complementarity Slackness Theorem
- Theorem 11.12: Complementarity Slackness Theorem
- Theorem 11.14: Necessary and sufficient conditions for global optimality