Chapter Outline

# Module A: Linear Programming

***See pages 744-783.***

Operations Profile: Using Linear Programming in the Restaurant Industry

Introduction

Features of a Linear Programming (LP) Problem

Formulating a Linear Programming Problem

Solving Linear Programming Problems: The Graphical Method

Solving Problems With Minimization Objective Using LP

Solving Linear Programming Minimization Problems: The Graphical Method

The Simplex Method of Linear Programming

Solving Linear Programming Problems Using Excel

Sensitivity Analysis

Changes in the Objective Function Coefficient

Changes in the Right-Hand-Side Values of the Resource Constraints

Additional Linear Programming Models

Module Summary

Key Terms

Discussion and Review Questions

Solved Problems

Problems

Case Study A.1: Happy Hour, Happy Profits