Contents

		The Theory of the Firm 15
1	1	What Is a Firm? 17
	2	The Profit-Maximization Hypothesis 35
	3	Supplementary Section: The Principal—Agent Relationship 51
		Answers and Hints 55
		References 56
	Ī	The Exercise of Monopoly Power 62
		Introduction 63
	1	Monopoly 65
	1.1	Pricing Behavior 66
	1.2	Cost Distortions 75
	1.3	Rent-Seeking Behavior 76
	1.4	Concluding Remarks 78
	1.5	Supplementary Section: Durable Goods and Limits on Monopoly Power 79
		Answers and Hints 88
		Appendix: A Heuristic Proof of the Coase
		Conjecture 91
		References 92
	2	Product Selection, Quality, and
		Advertising 95
	2.1	The Notion of Product Space 96
	2.2	Product Selection 100
	2.3	Quality and Information 106
	2.4	Advertising 115

2.5 2.6	Concluding Remarks 115 Supplementary Section: Repeat Purchases 116 Answers and Hints 126 References 129 Price Discrimination 133	5.3 5.4 5.5 5.6 5.7	Decreasing Returns to Scale and Capacity Constraints 212 Traditional Cournot Analysis 218 Concentration Indices and Industry Profitability 221 Concluding Remarks 223 Supplementary Section: Quantity Competition 224
2.7	Perfect Price Discrimination 135		Answers and Hints 234
3.1	Multimarket (Third-Degree) Price Discrimination 137		References 237
3.3 3.4 3.5	Personal Arbitrage and Screening (Second- Degree Price Discrimination) 142 Concluding Remarks 152 Supplementary Section: Nonlinear Pricing 153	6	Dynamic Price Competition and Tacit Collusion 239
0.0	Answers and Hints 163	6.1	Conventional Wisdom (Factors Facilitating and Hindering Collusion) 240
	References 166	6.2	Static Approaches to Dynamic Price Competition 243 Supergames 245
4.1 4.2 4.3 4.4	Vertical Control 169 Linear Prices versus Vertical Restraints 170 Externalities and Vertical Control 173 Intrabrand Competition 181 Interbrand Competition 185	6.4 6.5 6.6 6.7	Price Rigidities 253 Reputation for Friendly Behavior 256 Concluding Remarks 261 Supplementary Section: Dynamic Games and Tacit Collusion 262
4.5 4.6	Concluding Remarks 186 Supplementary Section: Competition-Reducing Restraints 187		Answers and Hints 271 References 274
	Answers and Hints 198 References 201	7	Product Differentiation: Price Competition and Non-Price Competition 277
		7.1	Spatial Competition 279
II	Strategic Interaction 204 Introduction 205	7.2 7.3 7.4	Monopolistic Competition 287 Advertising and Informational Product Differentiation 289 Concluding Remarks 295 Supplementary Section: Vertical Differentiation
5	Short-Run Price Competition 209	7.5	and Monopolistic Competition 296
5.1 5.2	The Bertrand Paradox 209 Solutions to the Bertrand Paradox:		Answers and Hints 300
J. 4	An Introduction 211		References 302

8	Entry, Accommodation, and Exit 305	10.5 10.6	Network Externalities, Standardization, and
8.1	Fixed Costs: Natural Monopoly and		Compatibility 404
	Contestability 307	10.7	Concluding Remarks 409
8.2	Sunk Costs and Barriers to Entry: The Stackelberg-Spence-Dixit Model 314	10.8	Supplementary Section: Patent Licensing and Research Joint Ventures 410
8.3 8.4	A Taxonomy of Business Strategies 323 Applications of the Taxonomy 328		Answers and Hints 415
8.5	Epilogue: Prices versus Quantities 336		References 419
8.6	Supplementary Section: Strategic Behavior and Barriers to Entry or Mobility 338		
	Answers and Hints 352	11	Noncooperative Game Theory: A User's Manual 423
	References 356	11.1 11.2	Games and Strategies 423 Nash Equilibrium 425
9	Information and Strategic Behavior:	11.3	Perfect Equilibrium 428
	Reputation, Limit Pricing, and Predation	11.4	Bayesian Equilibrium 432
	361	11.5	Perfect Bayesian Equilibrium 436
		11.6	Supplementary Section 444
9.1	Static Competition under Asymmetric Information 362		Answers and Hints 453
9.2	Dynamics: A Heuristic Approach 364		References 457
9.3	Accommodation and Tacit Collusion 365		
9.4	The Milgrom-Roberts Model of Limit Pricing		
	367		Review Exercises 460
9.5	Predation for Merger 374		
9.6	Multimarket Reputation 376		
9.7	The "Long Purse" Story 377		Index 473
9.8	Concluding Remarks 380		
9.9	Supplementary Section: Darwinian Selection in an Industry 380		
	Answers and Hints 384		
	References 386		
10	Research and Development and the Adoption of New Technologies 389		
10.1	Incentives as a Function of the Market Structure: The Value of Innovation 390		
10.2	Introduction to Patent Races 394		
10.3	Welfare Analysis of Patent Protection 399		

Alternative Inducements to R&D 400

10.4

401