

4 2013
7972

MORE THAN 7 MILLION GRUBER BOOKS SOLD!

"GARY GRUBER IS THE LEADING EXPERT ON THE SAT."—HOUSTON CHRONICLE

GRUBER'S

COMPLETE SAT* GUIDE 2013

**"THE
BEST BOOK
ON THE SAT."
—CBS RADIO**

16th Edition

The Easiest, Fastest Way to Improve Your Score

PROVEN METHODS FOR SMARTER STUDYING

- Unique Diagnostic Test Shows You Why You Got Questions Wrong—and How to Get Them Right
- The Gruber 150,000-Word Vocabulary Builder
- Mini-Math Refresher as Well as Complete Math Refresher
- Inside Info on How SAT Questions Are Created
- Student-Praised Writing, Vocab, Math, and Critical Reading Sections
- 5 Full-Length SAT Practice Tests

EFFECTIVE STUDY TOOLS THAT ARE ACTUALLY FUN

- The 101 Most Important Math Questions You Need to Know How to Solve
- The World's Shortest SAT Test (18 Questions) to Immediately Identify What You Need to Know
- The Most Important SAT Words and the Writing Questions Most Students Get Wrong
- Proven Strategies for Solving Problems Quickly
- Tons of Practice SAT Questions, Each Question Explained in Detail and Linked to a Gruber Strategy for Enhanced Skill

FEATURES THE EXCLUSIVE GRUBER SYSTEM THAT HAS RAISED ACTUAL SAT SCORES BY MORE THAN 600 POINTS!

Contents

INTRODUCTION

xiv

- | | |
|---|---|
| I. Important Facts About the SAT / xiv | VI. Longer-Range Study Program and Helpful Steps for Using This Book / xxviii |
| II. The Inside Track on How SAT Questions Are Developed and How They Vary from Test to Test / xxi | VII. Format of the SAT / xxix |
| III. What Are Critical Thinking Skills? / xxii | VIII. Questions Recently Asked of Dr. Gruber in Interviews / xxxi |
| IV. Multi-Level Approaches to the Solution of Problems / xxiv | IX. What You Can Do as a Parent to Help Your Child / xxxiv |
| V. A 4-Hour Study Program for the SAT / xxvii | |

PART 1

STRATEGY DIAGNOSTIC TEST FOR THE SAT

1

Directions for Taking the Diagnostic Test / 2

Section 2: Math Ability / 12

Strategy Diagnostic Test Answer Sheet / 3

Strategy Diagnostic Test Answer and Diagnostic Table / 18

Section 1: Verbal Ability / 4

PART 2

THE SHORTEST SAT TEST—18 QUESTIONS TO APPROXIMATE YOUR SAT SCORE

23

Verbal (Critical Reading) / 24

Answers / 27

Math / 25

Shortest SAT Test: What You Did Wrong, Explanatory Answers, Scoring, Strategies, and Basic Skills Needed to Improve / 28

Writing / 26

PART 3

THE 101 MOST IMPORTANT MATH QUESTIONS YOU NEED TO KNOW HOW TO SOLVE

29

101 Math Questions Answer Sheet / 30

101 Math Questions: Answers / 44

101 Math Questions Test / 32

Basic Skills Math Diagnosis / 46

101 Math Questions: Answers, Diagnoses, Solutions, Generalizations, and Rules / 43

Solutions, Generalizations, and Rules / 47

PART 4

STRATEGY SECTION

57

5 General Strategies / 58	What Reading Comprehension Questions Ask / 123
35 Easy-to-Learn Strategies / 60	Getting Involved with the Passage / 123
How to Learn the Strategies / 60	Introductory Passage 1 / 124
Important Note on the Allowed Use of Calculators on the SAT / 60	Breakdown and Underlining of Passage / 124
Important Note on Math Questions on the SAT / 61	How to Answer Reading Comprehension Questions Most Effectively / 125
The Grid-Type Math Question / 61	Introductory Passage 2 / 126
Use of a Calculator in the Grid-Type Question / 65	Introductory Passage 3 / 128
19 Math Strategies / 67	Summary / 130
16 Verbal (Critical Reading) Strategies / 115	About the Double-Reading Passages / 130
4 Sentence Completion Strategies / 116	9 Reading Comprehension Strategies / 131
Critical Reading Strategies / 123	3 Vocabulary Strategies / 146

PART 5

MINI-MATH REFRESHER

153

Algebra and Arithmetic / 154	Geometry / 157
------------------------------	----------------

PART 6

COMPLETE SAT MATH REFRESHER

163

Session 1—Fractions, Decimals, Percentages, etc. / 165	Session 3—Area, Perimeter, and Volume Problems / 213
Fractions, Decimals, Percentages / 166	Area, Perimeter, and Volume / 214
Deviations / 169	Practice Test 3 / 222
Ratios and Proportions / 170	Answer Key for Practice Test 3 / 231
Variations / 171	Answers and Solutions for Practice Test 3 / 231
Comparison of Fractions / 172	Session 4—Algebra Problems / 237
Practice Test 1 / 174	Algebraic Properties / 238
Answer Key for Practice Test 1 / 183	Fundamental Laws of Our Number System / 238
Answers and Solutions for Practice Test 1 / 183	Algebraic Expressions / 239
Session 2—Rate Problems / 187	Equations / 239
Word Problem Setup / 188	Algebra of Graphs / 241
Distance and Time / 190	Inequalities / 248
Work / 191	Exponents and Roots / 253
Mixture / 192	Practice Test 4 / 254
Cost / 192	Answer Key for Practice Test 4 / 262
Practice Test 2 / 194	Answers and Solutions for Practice Test 4 / 262
Answer Key for Practice Test 2 / 203	

Session 5—Geometry Problems / 267

- Basic Definitions / 268
- Triangles / 270
- Properties of Triangles / 271
- Four-Sided Figures / 274
- Many-Sided Figures / 275
- Circles / 275
- Practice Test 5 / 278
- Answer Key for Practice Test 5 / 287
- Answers and Solutions for Practice Test 5 / 287

Session 6—Miscellaneous Problems / 297

- Averages, Medians, and Modes / 298
- Standard Deviation / 299
- Properties of Integers / 300
- Approximations / 302
- Combinations / 303
- Permutations / 304
- Probability / 304
- The Absolute Value Sign / 304
- Functions / 305

- Practice Test 6 / 306
- Answer Key for Practice Test 6 / 312
- Answers and Solutions for Practice Test 6 / 312

Session 7—Tables, Charts, and Graphs / 316

- Charts and Graphs / 317
- Tables and Charts / 317
- Graphs / 318
- Bar Graphs / 319
- Circle Graphs / 320
- Line Graphs / 321
- Practice Test 7 and Solutions / 322

Session 8—Modern Math / 327

- Sets / 328
- Relations / 329
- Solution Sets / 329
- Axioms / 330
- Closed Sets / 330
- Mathematical Symbols / 330
- Practice Test 8 and Solutions / 331

PART 7

VOCABULARY BUILDING THAT IS GUARANTEED TO RAISE YOUR SAT SCORE

339

- Knowing Word Meanings Is Essential for a Higher SAT Score / 340
- 8 Steps to Word Power / 341
- The Gruber Prefix-Root-Suffix List That Gives You the Meanings of More Than 150,000 Words / 344
- Roots / 345
- Prefixes / 347
- Suffixes / 348

- A List of SAT Words Appearing More Than Once on Actual SAT Exams / 349
- The Most Important/Frequently Used SAT Words and Their Opposites / 351
- The Gruber SAT 3,400 Word List / 355
- 100 Tests to Strengthen Your Vocabulary / 404
- Answers to Vocabulary Tests / 447

PART 8

GRAMMAR AND USAGE REFRESHER

451

- The Parts of Speech / 453
- Clauses and Phrases / 456
- The Sentence and Its Parts / 459
- Verbs / 465
- Subject-Verb Relationship / 476
- Tense / 479
- Verbals / 483
- Mood and Voice / 487

Modifiers—Adjectives, Adjective Phrases, and
Clauses / 490

Modifiers (Continued)—Adverbs, Adverbial Phrases,
and Clauses / 496

Connectives / 500

Correct Usage—Choosing the Right Word / 505

Grammar and Usage Index / 509

PART 9

THE SAT WRITING TEST

513

The SAT Writing Section / 514

Content of the Writing Test / 514

The Essay on the SAT Writing Test / 515

The SAT Essay Scoring Guide / 518

 The Writing Sample / 519

 Sample Essays / 519

Important Tips on How to Write the Best
Essay / 521

Other Types of Questions on the SAT Writing
Test / 529

Identifying Errors / 529

Sample Questions with Answers / 529

Improving Sentences / 532

Sample Questions with Answers / 532

Improving Paragraphs / 536

Sample Test with Answers / 538

The Writing Questions Most Students Get Wrong / 540

PART 10

FIVE SAT PRACTICE TESTS

549

5 Important Reasons for Taking These Practice
Tests / 550

10 Tips for Taking the Practice Tests / 551

SAT Practice Test 1 Introduction / 552

Answer Sheet for Practice Test 1 / 553

SAT Practice Test 1 / 559

How Did You Do on This Test? / 605

Answer Key for Practice Test 1 / 606

SAT Score Conversion Table / 611

Chart for Self-Appraisal Based on the Practice Test
You Have Just Taken / 614

Explanatory Answers for Practice Test 1 / 617

What You Must Do Now to Raise Your SAT Score / 649

Answer Sheet for Practice Test 2 / 651

SAT Practice Test 2 / 657

How Did You Do on This Test? / 705

Answer Key for Practice Test 2 / 706

SAT Score Conversion Table / 711

Chart for Self-Appraisal Based on the Practice Test You
Have Just Taken / 714

Explanatory Answers for Practice Test 2 / 717

What You Must Do Now to Raise Your SAT Score / 748

Answer Sheet for Practice Test 3 / 750

SAT Practice Test 3 / 756

How Did You Do on This Test? / 803

Answer Key for Practice Test 3 / 804

SAT Score Conversion Table / 809

Chart for Self-Appraisal Based on the Practice Test You
Have Just Taken / 812

Explanatory Answers for Practice Test 3 / 815

What You Must Do Now to Raise Your SAT
Score / 848

Answer Sheet for Practice Test 4 / 850

SAT Practice Test 4 / 856

How Did You Do on This Test? / 903

Answer Key for Practice Test 4 / 904

SAT Score Conversion Table / 909

Chart for Self-Appraisal Based on the Practice
Test You Have Just Taken / 912

Explanatory Answers for Practice Test 4 / 915

What You Must Do Now to Raise Your SAT
Score / 944

Answer Sheet for Practice Test 5 / 946

SAT Practice Test 5 / 952

How Did You Do on This Test? / 999

Answer Key for Practice Test 5 / 1000

SAT Score Conversion Table / 1005

Chart for Self-Appraisal Based on the Practice Test You
Have Just Taken / 1008

Explanatory Answers for Practice Test 5 / 1011

What You Must Do Now to Raise Your SAT
Score / 1043

APPENDIXES

1045

Appendix A: Hot Prefixes and Roots / 1045

Appendix B: Words Commonly Mistaken for Each
Other / 1050