

HAYDEN
S O F T W A R E

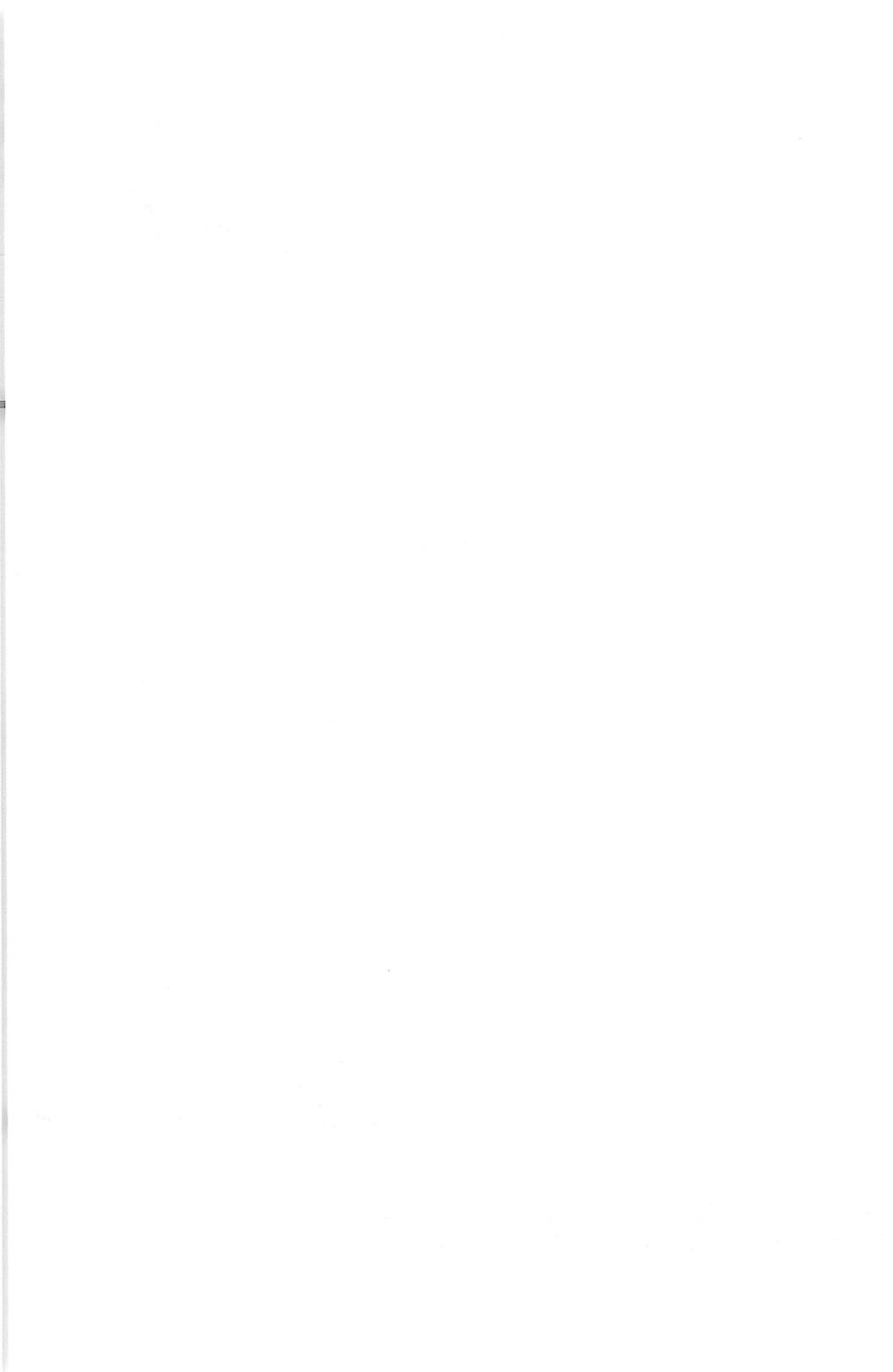
SCORE
IMPROVEMENT
SYSTEM FOR THE
SAT*

*Quantitative
Comparisons
And Word Problems*

PREPARE NOW!

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SCORE
IMPROVEMENT
SYSTEM FOR THE
SAT*

Math Module:
Quantitative Comparisons and
Word Problems Section
User's Guide

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INTRODUCTION

Welcome to the MATH MODULE of the HAYDEN SCORE IMPROVEMENT SYSTEM FOR THE SAT* one of three modules designed to help you raise your SAT scores. This Quantitative Comparisons and Word Problems Section is an effective tool to use in your preparation for the Mathematical section of the Scholastic Aptitude Tests. The system is easy to operate so that you can concentrate on its content. All of the information you need to complete examples or answer test questions appears on screen, as do instructions for moving from one part of the program to another. More detailed explanations follow in this manual. You can also read the instructions on screen by selecting the System User's Guide option after you load the program.

The QUANTITATIVE COMPARISONS AND WORD PROBLEMS SECTION provides review material on the areas in the Mathematical section of the SAT exclusive of Algebra and Geometry which are separate sections in the Hayden System. Quantitative comparison problems — problems that emphasize reasoning skills used to determine which of two quantities is larger — improve skills in algebra and geometry as well as in other areas of mathematics.

This section includes ten parts in addition to the User's Guide:

- Quantitative Comparisons
- Fractions and Decimals
- Percentages
- Ratios and Proportions
- Graphs
- Motion Problems
- Mixture Problems
- Business and Work Problems
- Sequences
- Miscellaneous

In addition, this manual contains an ANALYSIS OF THE SAT which gives you insight into the workings of the actual exam — its organization and scoring, plus test-taking strategies and tips for raising your scores.

This section contains a two-sided disk: a Program Disk side and a Review Disk side. Always load the Program Disk side first. Instructions on the screen will prompt you to insert the other side at the appropriate time.

1. USING THE HAYDEN SYSTEM

Menus

After you have loaded the Hayden Score Improvement System Program Disk side into your computer's memory (see the loading instructions card) you will see the MAIN MENU:

MAIN MENU

- A. System User's Guide
- B. Quantitative Comparisons
- C. Fractions and Decimals
- D. Percentages
- E. Ratios and Proportions
- F. Graphs
- G. Motion Problems
- H. Mixture Problems
- I. Business and Work Problems
- J. Sequences
- K. Miscellaneous

The MAIN MENU lets you move easily from one section of the program to another. Simply press the key corresponding to the letter next to the section you wish to see.

The DETAIL MENU lists the options available in each part of the program:

DETAIL MENU

- A. Definitions, Analysis and Strategies
- B. Examples With Tutormode
- C. Examples Without Tutormode

Definitions, Analysis and Strategies should be reviewed before beginning the examples. It provides useful strategies for tackling the kind of questions the subject covers. First, background information on each question type is presented, then methods for answering these questions, including valuable tricks and shortcuts, are demonstrated.

Examples With Tutormode is the core of the Hayden System. This option gives you a detailed, step-by-step explanation of how to arrive at the correct answer. By reviewing and practicing, you develop more efficient problem-solving techniques.

Examples Without Tutormode provides quick drill and practice in areas where you are already strong so that you can improve speed and accuracy. If you answer incorrectly, you are shown the correct answer, but no detailed explanation is provided. At the end of the section, the computer tallies the number of questions answered correctly and incorrectly, providing an indication of how well you have mastered the subject.

After you make a selection, the system will start displaying the review material or prompt you to load the other side of the disk.

Function Keys

A function key is a key which has a specific effect on the program's operation each time it is pressed.

Whenever a menu is on your screen the following function keys are operational: M (Main Menu) and Q (Quit). Pressing "M" always brings you back to the Main Menu. Pressing "Q" causes the computer to ask if you really want to quit. Answering "Y" ends the program. If you answer "N", you may continue where you left off.

While text (either instructions or review material) is on the screen, pressing "R" restarts the section (erasing any previous answers you may have entered), pressing "M" takes you to the last menu displayed and pressing "Q" enables you to quit.

The left-arrow key lets you page backwards through the text one screen at a time until the first screen of the section is reached. When a question appears on the screen, your previous answer, if any, is shown. You can replace that answer by entering another one, or you can leave your answer undisturbed by pressing the left-arrow again.

Pressing the letter "O" leaves the current question temporarily unanswered and displays the next question. At the end of the section you have a chance to review all the unanswered questions.

Only the Verbal and Mathematical sections count towards your SAT score, though you will not be told which section is experimental. The TSWE and Experimental sections are used for college placement and test control and are not included in your SAT score.

Recording Answers

Each section of the SAT is preceded by a separate set of directions. Read the directions carefully to make sure you understand what you are being asked to do.

Here is an example a set of directions similar to those found in the actual exam.

Directions: Each question below consists of a related pair of words or phrases, followed by five lettered pairs of words or phrases. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

Example:

Prong:Fork (a) headlight:lamp
 (b) cylinder:motor
 (c) knife:edge
 (d) illustration:book
 (e) fence:house

(a) (b) (c) (d) (e)

(Darken the letter of your choice. In this example, (b) cylinder:motor is the correct choice.)

When recording your choices, avoid any stray marks on the answer grid. Such marks could invalidate an otherwise correct choice.

SAT Scoring

Your answer sheet is evaluated by a scanning machine and the spaces blackened for each question are recorded on a computer tape.

The computer compares your answers with the correct responses to calculate your raw score. Each correct answer is worth one point. Questions omitted do not count toward your score. For incorrect answers, fractions of points are deducted: 1/4 point for questions with five choices and 1/3 point for questions with four choices. Therefore you should avoid random guessing. However, when you are able to reduce your choices to two, most educators advise you to guess.

The following conversion chart shows how raw scores are then converted into SAT scaled scores ranging from 200 to 800. The Hayden Score Improvement System utilizes this chart to calculate your SAT equivalent scores.

Conversion Chart

Raw Scores to College Board Scores

Raw Score	Verbal Section	Raw Score	Verbal Section
85	800	40	470
80	760	35	430
75	720	30	400
70	680	25	360
65	640	20	330
60	600	15	290
55	570	10	260
50	540	5	220
45	500	0	200

Raw Score	Mathematical Section	Raw Score	Mathematical Section
60	800	25	480
55	750	20	440
50	700	15	390
45	650	10	350
40	620	5	300
35	570	0	250
30	520		

Your performance is compared with the performance of other students in the country. Approximately two-thirds of the students who take the SAT score between 400 and 600 on each of the tests.

The score required for admittance to a particular college or university is not fixed. No minimum score represents automatic admission.

Best Preparation

If you practice the skills necessary to do well on the SAT, study the examination format, and learn to work within the prescribed time limit for the exam, you can achieve higher scores and greater confidence in test-taking.

The Hayden Score Improvement System is designed to help prepare you to take the SAT in an intelligent manner. It will train you to work within the time allotted for each section of the exam so that you can enter the exam room with a sense of ease, confidence and preparedness.

APPENDIX

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