MATHTUTOR™ SOFTWARE SERIES USER GUIDE

(c) 1988-2020 Intelligent Software, Inc.

The following pages contain instructions for:

- **Downloading and installing the software**
- **Using the program menu to select a course and begin study**

The MathTutor™ Software Series consists of:

- **Concepts and Skills Series**
- **Practice and Review Series**
- **Special Topics Series**

System Requirements

Windows XP, Windows Vista, or Windows 7/8/10

INTELLIGENT SOFTWARE, INC.
9609 Cypress Ave.
Munster, IN 46321
(219) 923-6166

Downloading and Installing the MathTutor™ Software

To download the installation file for the courseware programs
and the recordkeeping program, please use the link
on the Web page we have set up for you.

Starting the MathTutor™ Menu

1. Launch the MathTutor Menu as follows:

   If the MathTutor software has been installed on standalone PCs

   - Click the **Start** button on the Windows taskbar
   - Choose **Programs**. The Programs folder opens.
   - Choose **Intelligent Tutor**. Then choose "**MathTutor Menu**".

   If the MathTutor software has been installed on a peer-to-peer or other network

   - Double-click the shortcut on the student workstation's desktop that points to "MathTutorMenu.exe" in the "Tutor" folder on the server.

2. Click the program you wish to run. The program will then begin, and the title screen will appear. Click the "Click to Continue" button.

3. The **Student Login** screen will appear. To keep records on your progress select your name from the list of names and click **Login**.

4. Use the program menu to select a lesson you would like to study, or a practice problem area.

5. To end the program, open the File menu above the courseware program menu and click "Exit".

Note on Using the Six Programs in the Concepts and Skills Series as well as Learning Business Math, and Advanced Business Math

Each of the lessons in these programs contains four sections. The **Concept** section teaches the main concepts of the lesson. The **Examples** section shows examples. The **Practice** section lets you to practice problem solving. And the **Test** section allows you to take a lesson test. A navigation bar to the right of the lesson window allows you to move between these four sections.

Note on Using the Six Programs in the Practice and Review Series, and SAT/ACT Math

Each of these programs allows you to practice problem solving in a wide variety of problem areas. Practice tests are also available to help you identify your strengths and weaknesses.

Overview: MATHTUTOR™ Concepts and Skills Series

The MATHTUTOR™ Concepts and Skills Series consists of six programs, covering the levels of math normally taught in Grades 7-12. Each program is a complete and self-contained course designed especially for students and others engaged in self-study. Each is designed to allow you to work at your own pace, using easy to follow tutorials and problem solving exercises.

The programs in the series were designed by math educators, and are comprehensive yet simple to use. Our goal is to build your math skills and make you more confident about using math in your everyday life, both inside and outside the classroom.

The lessons in each program provide you a dynamic and unique learning experience. Graphics and animation are used throughout the lessons to present the ideas of math clearly and concretely.

Although the lessons are designed to be worked in order, you can study them in any order you wish. Easy to use menus allow you to go directly to any of the lessons in the program.

The six programs in the Concepts and Skills Series are:

- PRE-ALGEBRA
- ALGEBRA 1
- GEOMETRY
- ALGEBRA 2
- TRIGONOMETRY AND ADVANCED TOPICS
- INTRODUCTORY CALCULUS

Overview: MATHTUTOR™ Practice And Review Series

The MATHTUTOR™ Practice and Review Series consists of six programs, covering the levels of math normally taught in Grades 7-12. Each program will help students develop problem solving skills, and reinforce their understanding of basic concepts and principles. Designed by educators, each program provides a comprehensive range of drill and practice exercises that will provide challenging practice for students, even after being used many times.

Each program can be used in two ways: Practice Mode and Test Mode.

Practice Mode allows you to select a problem type and to practice solving problems of that type. After each problem, you are told if your answer was correct or incorrect. You are then given these options: to re-do the problem; to see an explanation of the problem; to try another problem of the same type; to return to the Practice Menu to select another problem type; or, to return to the Main Menu.

Test Mode allows you to take sample tests. Following the test you will see your performance on each problem, as well as an overall evaluation of your skill level.

The six programs in the Practice and Review Series are:

- PRE-ALGEBRA
- ALGEBRA 1
- GEOMETRY
- ALGEBRA 2
- TRIGONOMETRY AND ADVANCED TOPICS
- INTRODUCTORY CALCULUS

Overview: MATHTUTOR™ Special Topics Series

The MATHTUTOR™ Special Topics Series consists of three programs covering special areas within the math curriculum: LEARNING BUSINESS MATH, ADVANCED BUSINESS MATH, and SAT/ACT MATH.

LEARNING BUSINESS MATH and ADVANCED BUSINESS MATH

LEARNING BUSINESS MATH and ADVANCED BUSINESS MATH were designed by math educators, and are comprehensive yet simple to use. LEARNING BUSINESS MATH covers all the topics normally taught in a one-year course in business mathematics. ADVANCED BUSINESS MATH covers the material taught in a one-semester course in advanced business and financial mathematics. These two programs will help you build the math skills necessary in business and financial applications.

The lessons in the programs will provide you with a dynamic and unique learning experience. Graphics and animation are used throughout the lessons to present the ideas of math clearly and concretely.

Although the lessons are designed to be worked in order, you can study them in any order you wish. Easy to use menus allow you to go directly to any of the lessons in the programs.

SAT/ACT MATH

SAT/ACT MATH is designed to help you improve your performance on the Math Section of the SAT I and ACT exams. Designed by educators, it provides a comprehensive range of drill and practice exercises that will provide challenging practice for students, even after being used many times.

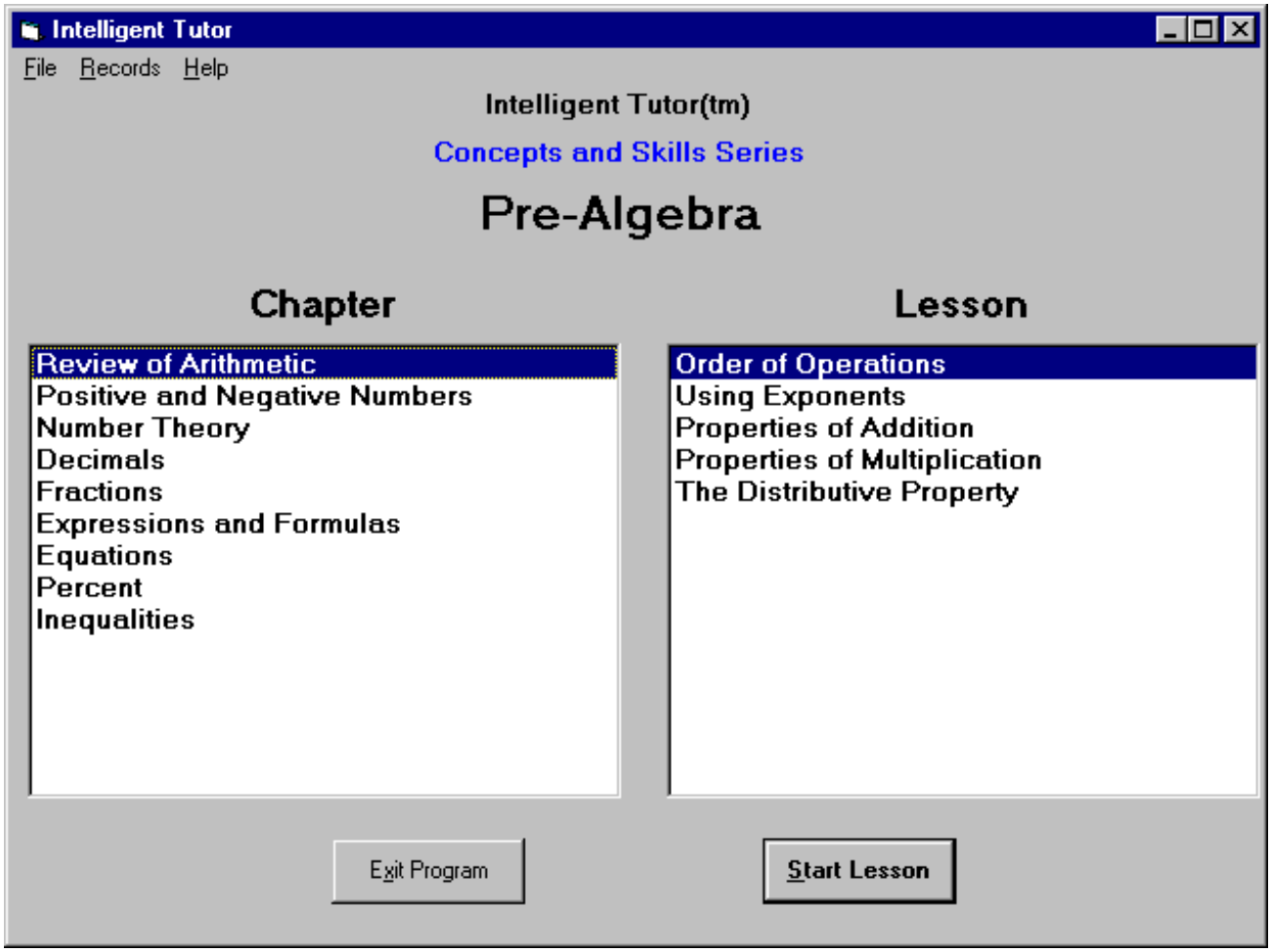
SAT/ACT MATH can be used in two ways: Practice Mode and Test Mode.

Practice Mode allows you to select a problem type and to practice solving problems of that type. After each problem, you are told if your answer was correct or incorrect. You are then given these options: to re-do the problem; to see an explanation of the problem; to try another problem of the same type; to return to the Practice Menu to select another problem type; or, to return to the Main Menu.

Test Mode allows you to take sample tests. Following the test you will see your performance on each problem, as well as an overall evaluation of your skill level.

Concepts and Skills Series: Using the Menu

Note - <u>The instructions and information on this and the following pages refer to Pre-Algebra. The other five programs in the series, and Learning Business Math, contain similar screens and these instructions apply to them as well.</u>



The program menu (shown above) is the starting point for your study of pre-algebra. The **CHAPTER** window shows the chapters in the course. The **LESSON** window shows the lessons in the current highlighted chapter. To see a list of the lessons in a different chapter, click that chapter in the **CHAPTER** window.

To study a lesson, click the lesson in the **LESSON** window. Then click the **START LESSON** button at the bottom. Your lesson will then begin!

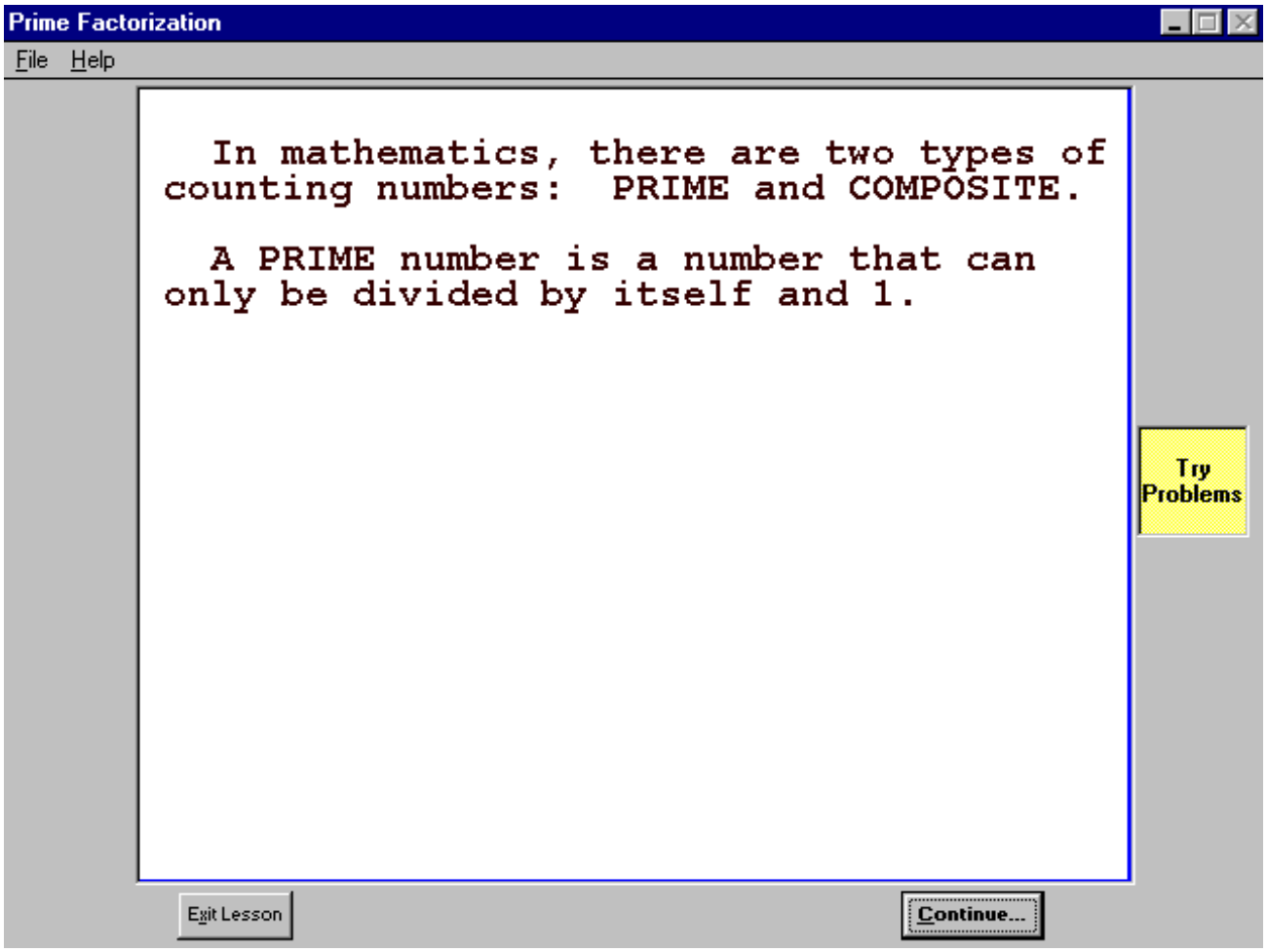
The beginning student is encouraged to work the chapters and lessons in order.
But the program gives you the freedom to study the lessons in any sequence you wish.

Concepts and Skills Series: Working a Lesson

As you work your way through lessons, and try your hand at solving problems, you may wish to see a summary of how well you are doing in the current session. The RECORDS menu allows you to see a summary of your performance in the current session.

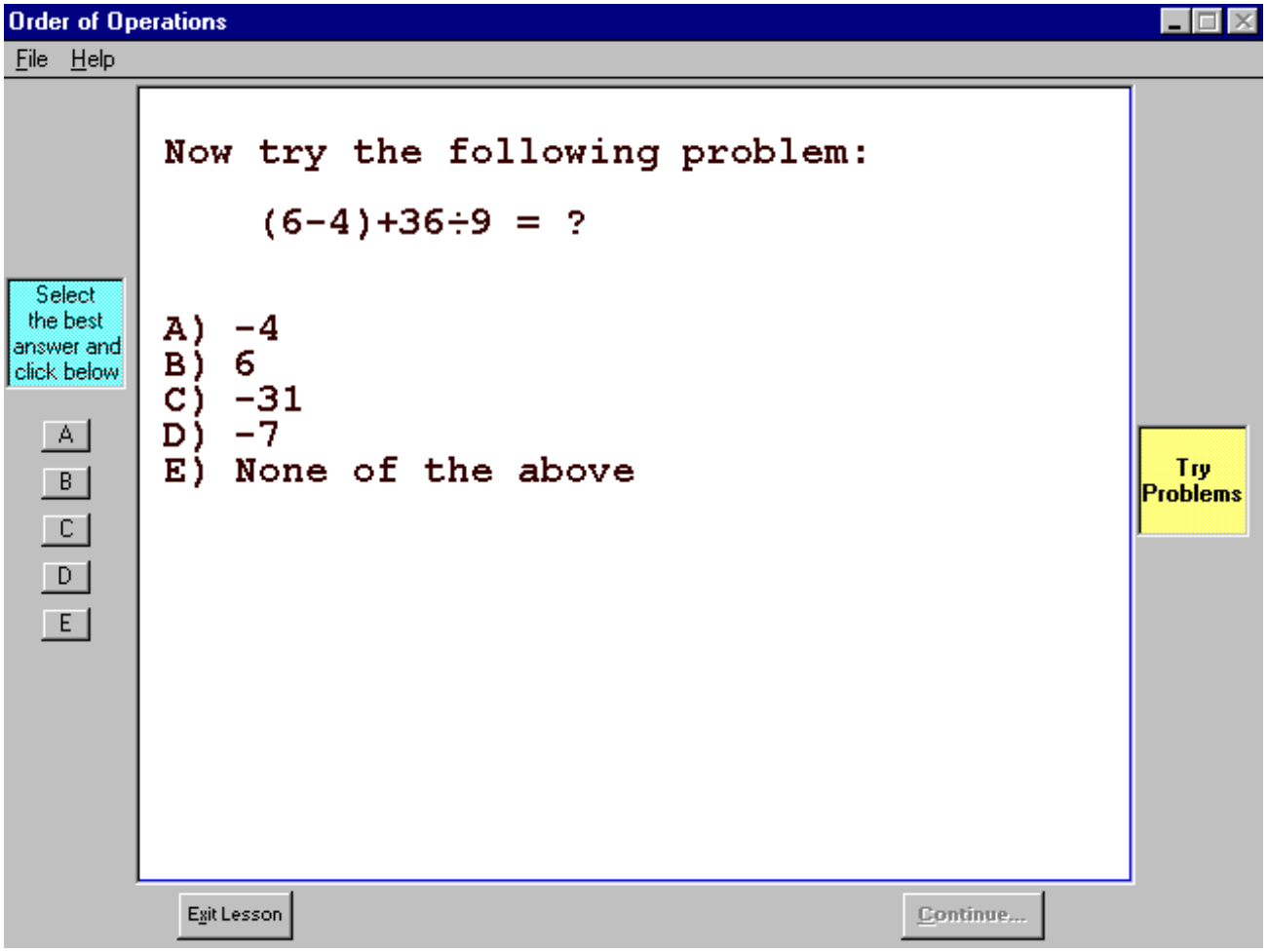
After entering a lesson, you can move through the lesson at your own pace by clicking the "**CONTINUE...**" button at the bottom of the window. To return to the program menu click the "**EXIT LESSON**" button at the bottom of the window. To restart the current lesson use the **File** menu and select "**Restart Lesson**".

Most lessons have a similar format. First, the main concepts and ideas are presented. Then, one or more examples are presented to illustrate the concepts. After seeing these you will be asked if you would like to see another example. If you click "Yes" you will be shown another example. You will be able to see as many additional examples as you wish. If you click "No" you will be shown a problem to solve.



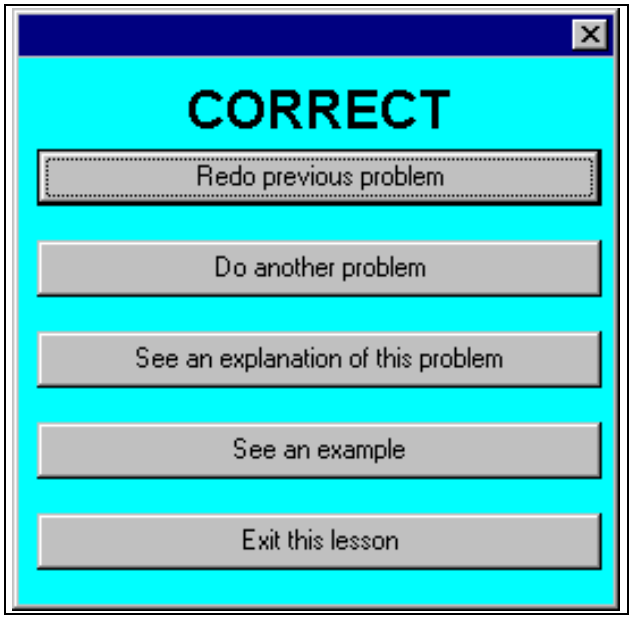
Concepts and Skills Series: Working a Lesson (continued)

Trying to solve problems is one of the best ways for you to build your math skills, so we encourage you to spend some time on problem solving in each of the lessons you study. After trying a problem you'll have a chance to see the program solve the problem you just tried.



When the program presents a problem for you to solve, the possible answer choices will be displayed in a multiple choice format. To select an answer, click one of the answer choice buttons in the left margin.

The program will respond by telling you if your answer was correct or incorrect. The options available to you at this point are shown below.



After doing a problem, select one of the options shown to the left.

Most of the choices are self-explanatory.

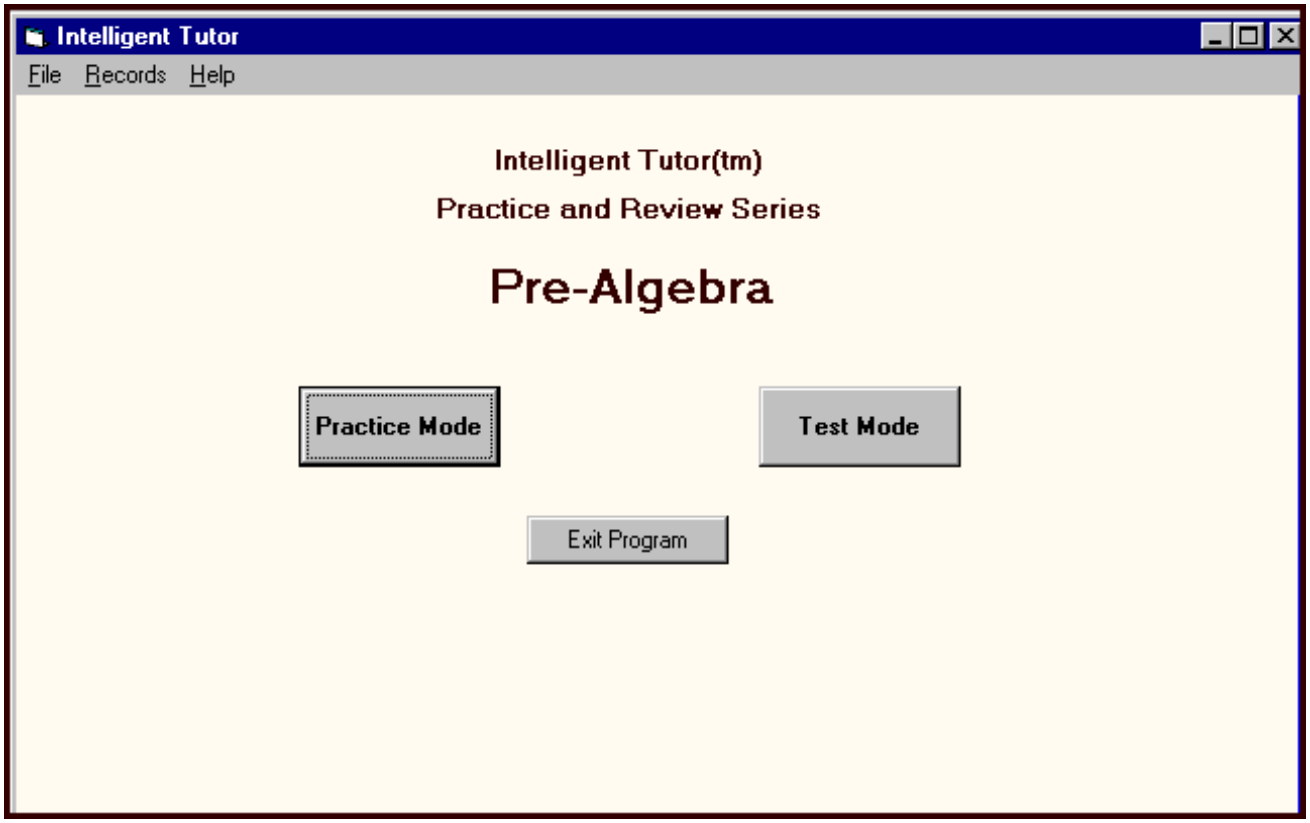
If you did not solve the problem correctly, and would like to see how it can be solved, select the third option choice: "**See an explanation of this problem**".

Summary of How to Navigate a Lesson

In order to do this, then...	Do This
Proceed sequentially through a lesson	Click the "Continue..." button
Go directly to doing problems	Click the "Try Problems" button in the right margin
Select an answer to a problem	Click one of the answer choice buttons (A, B, C, D, E) in the left margin
Restart the current lesson	Choose "Restart Lesson" from the File menu
Return to the program menu	Click the "Exit Lesson" button, or choose "Return to Menu" from the File Menu

Practice and Review Series: Using the Menu

Note - <u>The instructions and information on this and the following pages refer to Pre-Algebra. The other five programs in the series, and SAT/ACT Math, contain similar screens and these instructions apply to them as well.</u>



The main program menu (shown above) is your take-off point for using the two main parts of the program - Practice Mode and Test Mode.

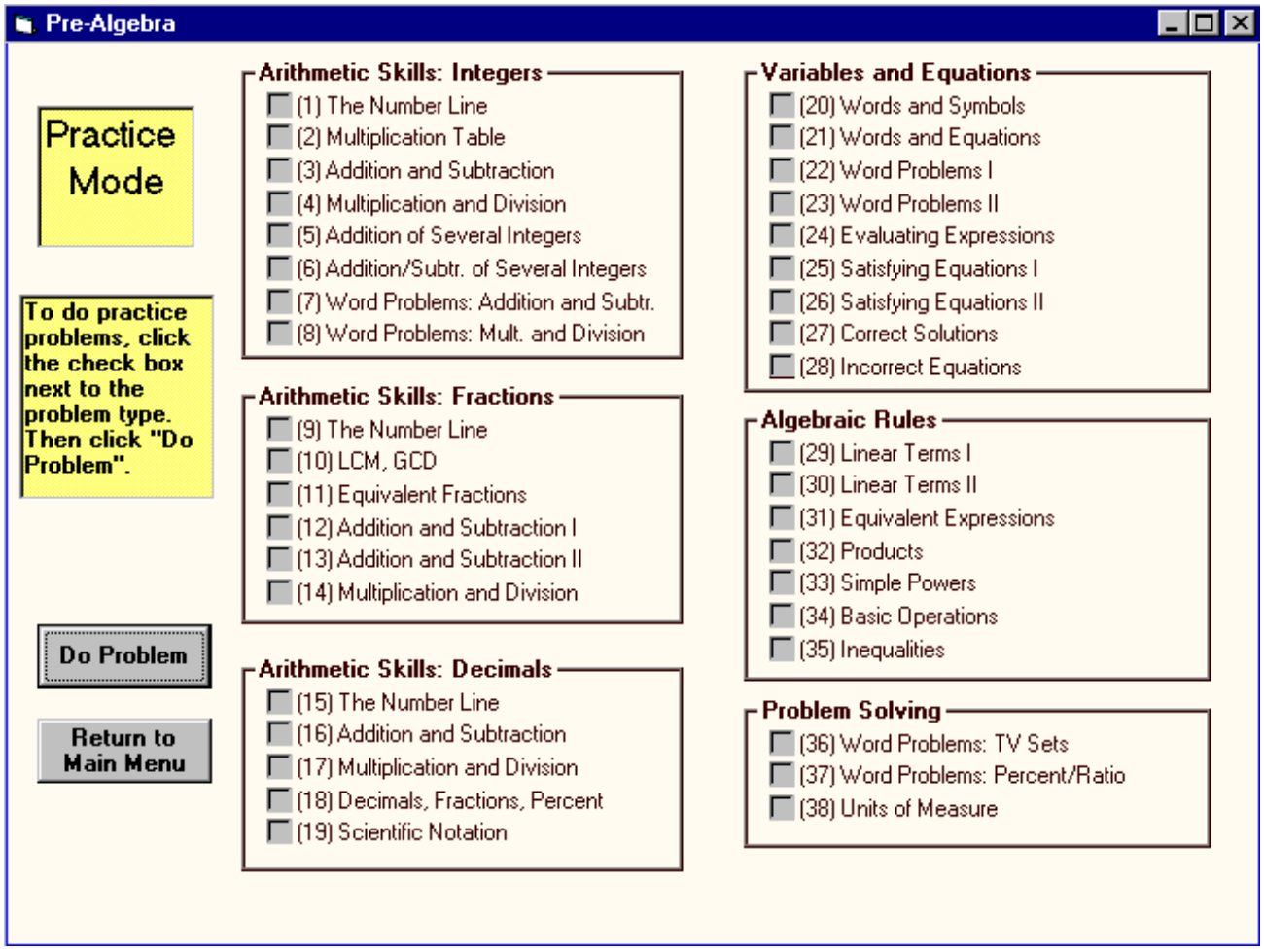
Click **Practice Mode** to see the Practice Mode Menu, which is described on the following page.

Click **Test Mode** to see the Test Menu, which is described on page 13.

Click **Exit Program** to end the program.

As you use the program, you may wish to see a summary of how well you are doing in the current session. The RECORDS menu allows you to see a summary of your performance in the current session.

Practice and Review Series: Practice Mode



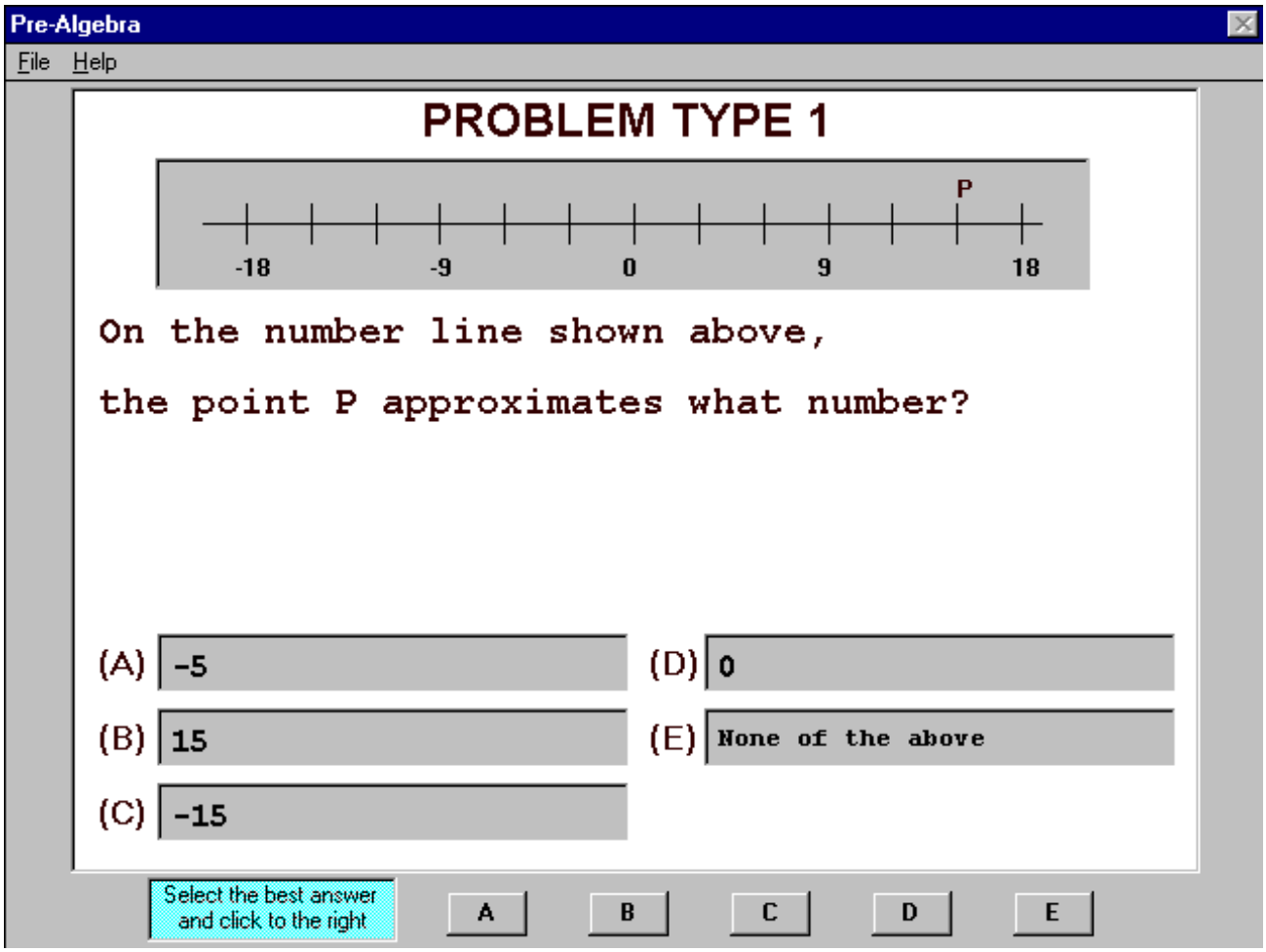
If you selected “Practice Mode” on the main menu you will see the Practice Mode menu (above).

This menu allows you to select a problem type to practice. Each of the 38 problem types contains thousands of random variations, assuring that the program will continue to provide new and challenging problems even after being used many times.

The Practice Mode menu groups the problems into six problem set areas, making it easier for you to find particular kinds of problems that you may wish to practice.

To begin practice in problem solving, click the check box to the left of the problem type description. Then click the “Do Problem” button.

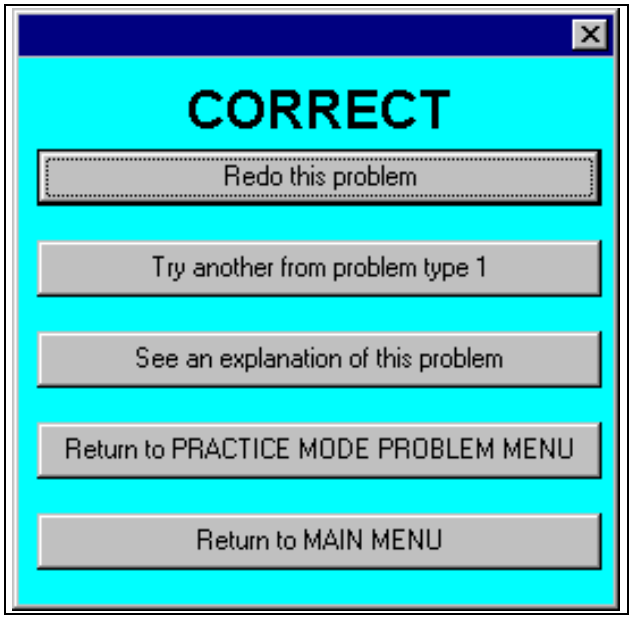
After trying a problem you'll be told immediately if your answer was correct or incorrect. If you like, you’ll be able to re-do the problem. You’ll also be able to see an explanation of the solution to the problem.



When the program presents a problem for you to solve, such as you see in the screen above, the answer choices will be displayed in a multiple choice format. To select an answer, click the box that contains the answer, or click one of the answer choice buttons at the bottom of the screen.

The program will respond by telling you if your answer was correct or incorrect. The options available to you at this point are shown on the following page.

Practice and Review Series: Practice Mode (continued)



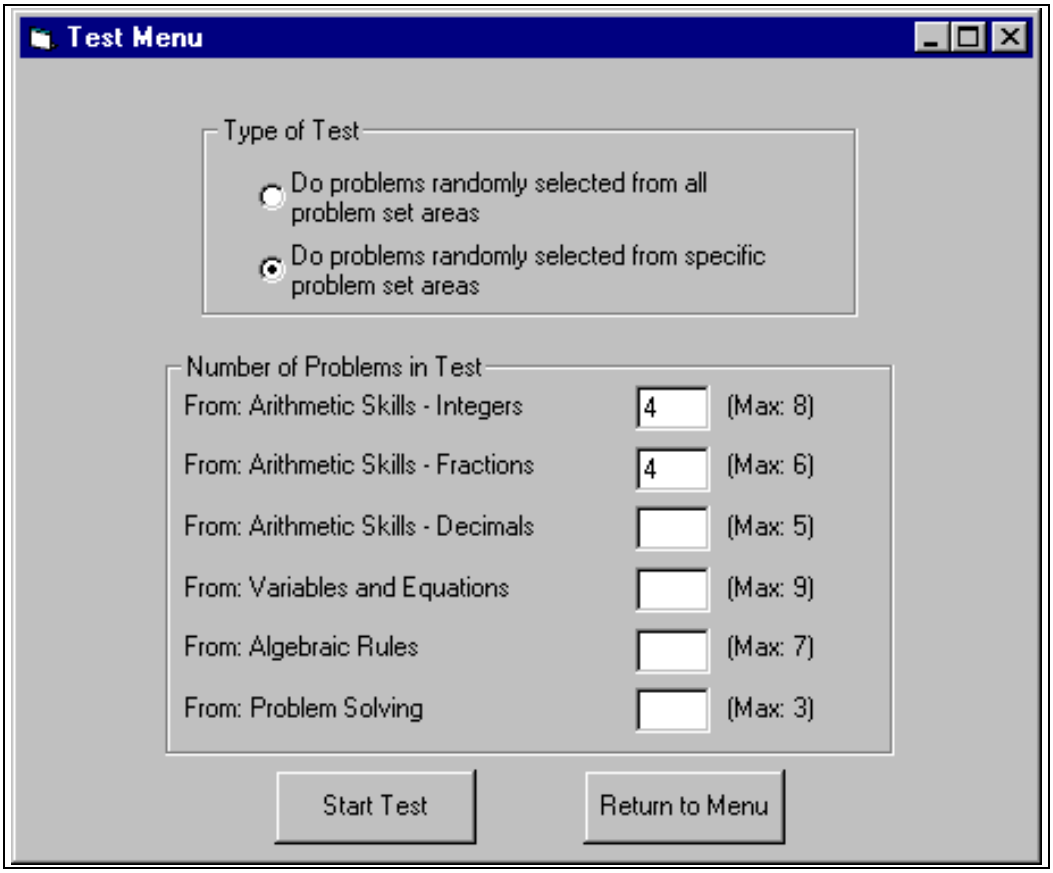
After doing a problem, select one of the options shown to the left.

Most of the choices are self-explanatory.

If you did not solve the problem correctly, and would like to see how it can be solved, select the third option choice: "**See an explanation of this problem**".

Trying to solve problems is one of the best ways for you to build your math skills, so we encourage you to spend time practicing problems.

Practice and Review Series: Test Mode



If you selected "Test Mode" on the main menu you will see the Test Menu shown above. Test mode allows you to take sample tests, and to see both a detailed evaluation of your performance and an overall evaluation of your skills.

Before you begin a test, you must specify two things. First, you must specify if you want your test to contain problems from all problem sets, or from selected problem sets. Second, you must specify the number of problems in your test. (If your test is from selected problem sets you must specify the number of problems you wish to do in each problem set.)

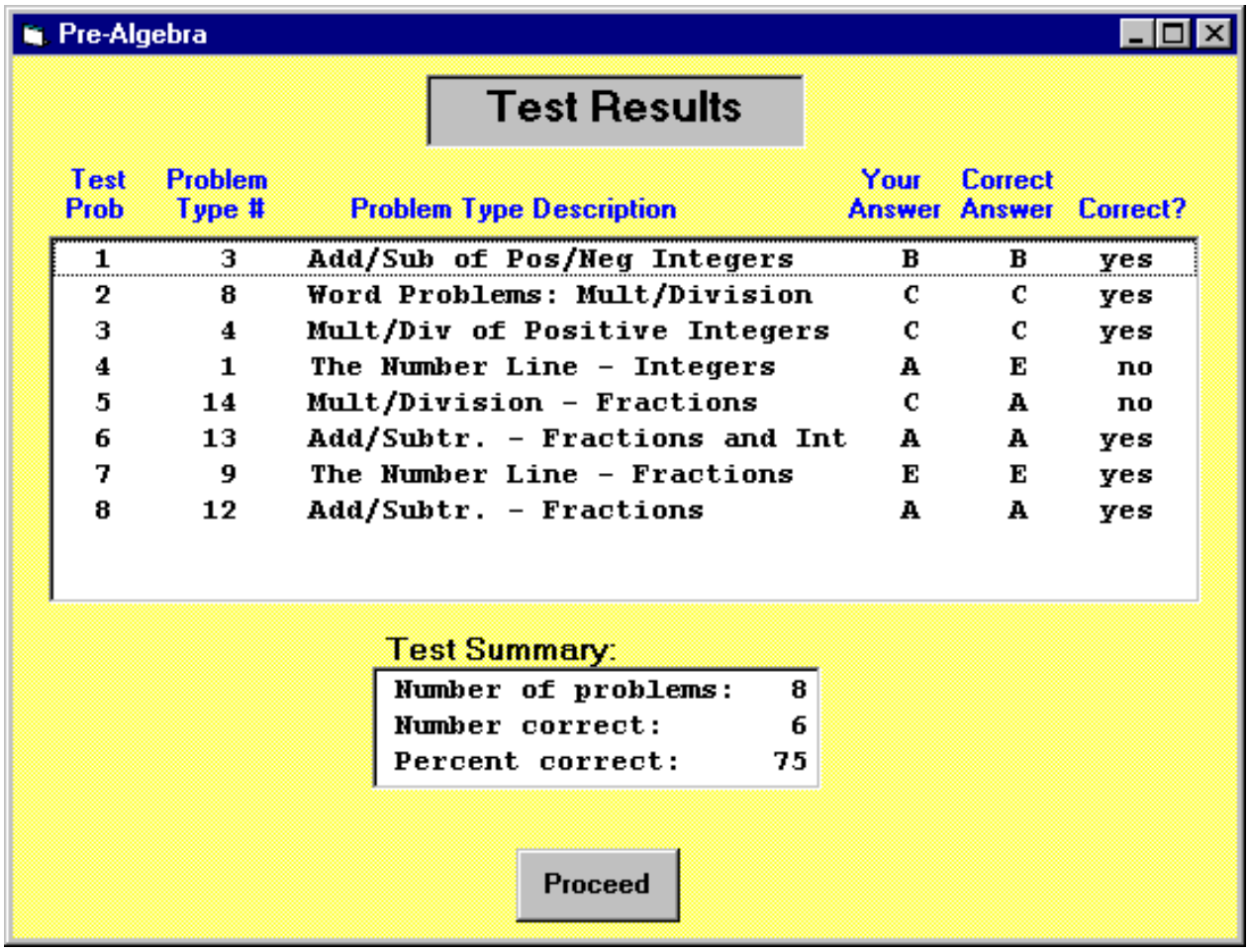
In the Test Menu screen above, you can see that we have specified that our test will consist of four problems from the problem set "Arithmetic Skills - Integers", and four problems from "Arithmetic Skills - Fractions". When the program begins the test, four problem types will be randomly selected from the eight problem types contained in "Arithmetic Skills - Integers", and four problem types will be randomly selected from the six problem types contained in "Arithmetic Skills - Fractions".

To begin your test, click "Start Test".

Practice and Review Series: Test Mode (continued)

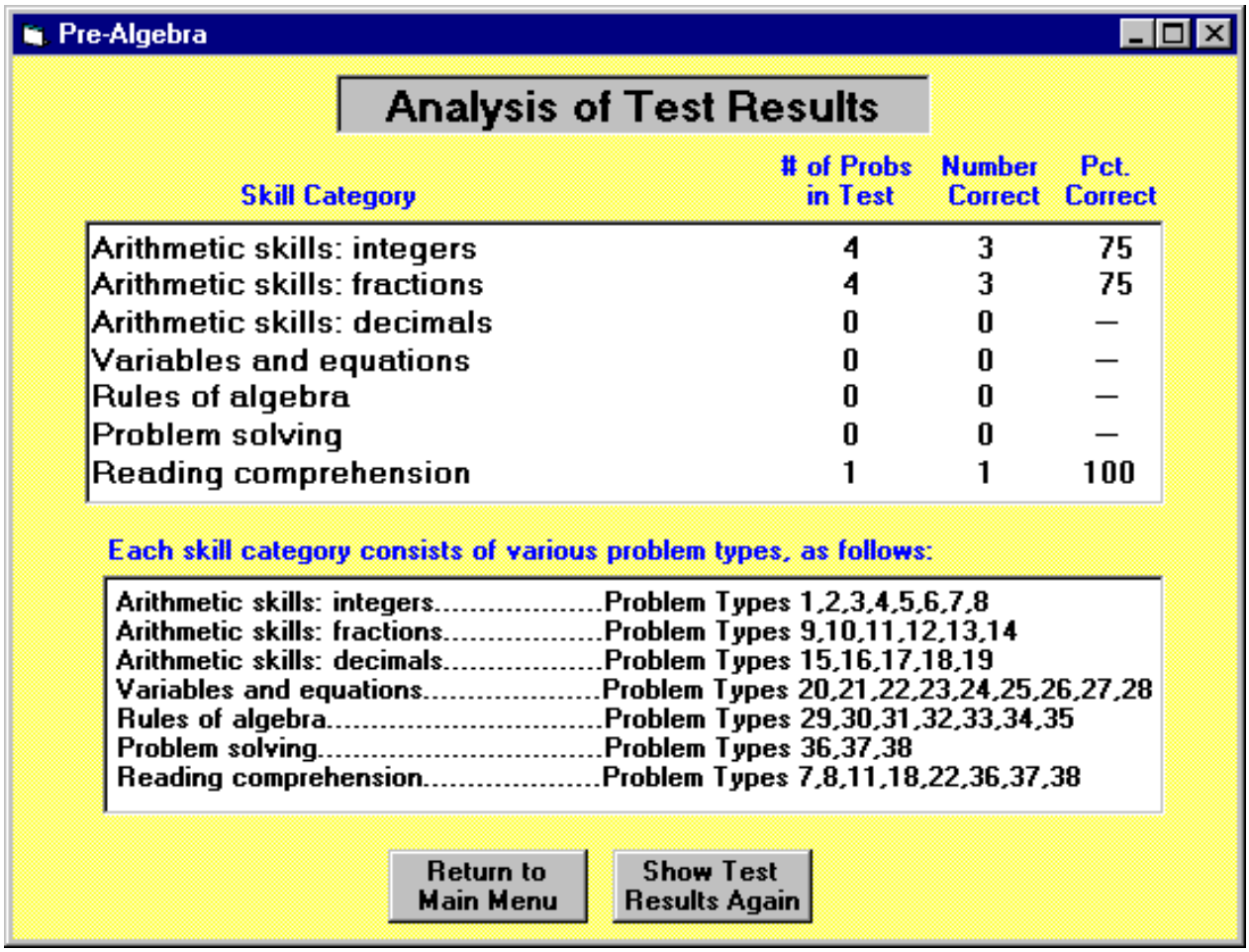
After completing the test, the program will show you the results in two separate screens.

First, you will see your performance on each of the test problems, as shown below. For each test problem you are shown the problem type number, the problem type description, your answer, the correct answer, and whether your answer was right or wrong. Your overall percentage correct is shown in a summary box at the bottom at the screen.



Practice and Review Series: Test Mode (continued)

Next, you will see an evaluation of your performance by skill category, as shown below. Each skill category represents a group of problem types that require a certain skill. The skill categories are explained in the table at the bottom of the screen. For example, the skill category "reading comprehension" consists of problem types 7, 8, 11, 18, 22, 36, 37, and 38.



The Recordkeeping System

Overview

Each program in the MathTutor series contains a recordkeeping system that provides a complete history of each student's use of the program. Here's how it works. As students use the program, the following information is automatically stored in the **Student Records File**:

- Student Name
- Date
- Name of lesson
- Number of problems attempted
- Number of problems answered correctly
- Number of minutes spent in the lesson

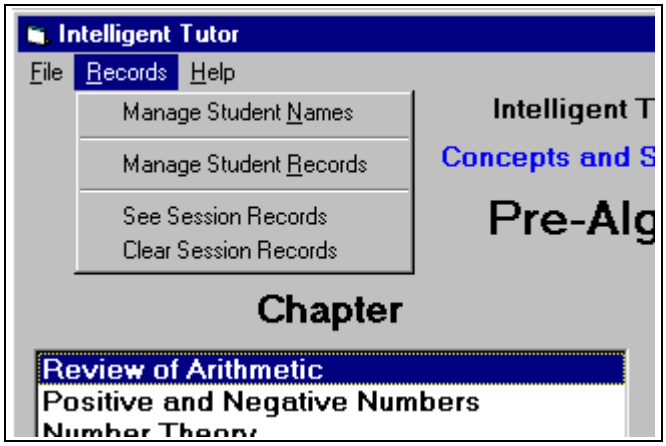
The recordkeeping system displays a list of the lessons a student has studied, the dates on which they used the program, the number of minutes spent in each lesson, and the student's performance in solving problems in each lesson. This information can be viewed for one student, or for all students. The information can be displayed on screen, or on a printed report.

NOTE: This program and its recordkeeping system are not designed for network or site license use. It is designed for use on a single computer. If you wish to use this program on more than one computer you may purchase additional copies of the program at a special reduced priced ("lab disks"), or you may purchase a site license.

The recordkeeping system can handle up to 50 students.

Using the Recordkeeping System

The recordkeeping system is available through the **RECORDS** menu. There are two options: **Manage Student Names** and **Manage Student Records**.



NOTE: Please don't confuse the Recordkeeping System with "Session Records".

"Session Records" show a student how well he or she is doing during the current session, but are not stored after the session has ended.

The Recordkeeping System (continued)

Manage Student Names

In order to maintain student records, you must first create a **Student List** of one or more names. A student list is needed to enable students to select their name from the list and to "log in".

The **Manage Student Names** screen allows you to add and delete student names, and to edit student names.

To add a student:	Click the **Add a Student** button. Then type the name of the student and click **OK**.
To delete a student:	Click the student's name in the Student List. Then click the **Delete a Student** button.
To edit a student name:	Click the student's name in the Student List. Then click the **Edit Student Name** button. Type the new name and click **OK**.
To delete all student names:	Click the **Erase All Students** button.

Manage Student Records

The **Manage Student Records** screen allows you to display on the screen, or print, records for an individual student or for all students. You may also erase the records of a single student, or all students.

To display the records for all students:	Click the **Display Records for All Students** button.
To print the records for all students:	Click the **Print Records for All Students** button.
To erase the records for all students:	Click the **Erase Records for All Students** button.
To display the records for a single student:	Click the student's name in the Student List. Then click the **Display Records for Selected Student** button.

The Recordkeeping System (continued)

To print the records for a single student: Click the student's name in the Student List. Then click the **Print Records for Selected Student** button.

To erase the records for a single student: Click the student's name in the Student List. Then click the **Erase Records for Selected Student** button.

The illustration below shows how records are displayed on the screen for a single student. Notice the sort choices shown at the bottom of the display. They enable you to sort the records by date, by lesson name, or by percent correct.

When you are done viewing the records, click **Done** to return to the **Manage Student Records** screen.

