INTELLIGENT TUTOR™ SPECIAL TOPICS SERIES

BUSINESS MATH II

(c) 1988-2018 Intelligent Software, Inc.

Deluxe Recordkeeping Edition - Windows Version

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Installation Instructions

1. Insert the MathTutor Software Series Installation CD-ROM into your CD-ROM drive. The MathTutor Installation Launcher menu will appear.

2. On the menu, in the section labeled "Step 1 - Select Version", click "Deluxe Versions".

3. On the menu, in the section labeled "Step 2 - Select Title", click the program you wish to install.

4. Click the "Install" button.

5. Enter the installation password for the program you have selected, then click OK. NOTE: The installation passwords can be found on the back cover of the CD-ROM sleevecase.

6. Follow the instructions on the screen. When the installation is complete you will return to the MathTutor Installation Launcher menu. You may then install another program, or quit.

System Requirements

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

Starting a MathTutor Program

1. Click the **Start** button on the Windows taskbar. The Start menu opens.
2. Choose **Programs**. The Programs folder opens.
3. Choose **Intelligent Tutor**.
4. Click the program you wish to run. The program will then begin, and the title screen will appear. Click the title screen to continue.
5. The **Student Login** screen will appear. To keep records for this session, select a name and click **Login**. If you prefer to not keep records for this session, click **Skip Login**.
6. Use the main menu to select a lesson you would like to study, then click "Start Lesson".

Each of the lessons in these programs contains four sections. The **Concept** section allows you to learn the main concepts of the lesson. The **Examples** section shows examples. The **Practice** section allows 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.

Welcome to Business Math II

Welcome to BUSINESS MATH II in the INTELLIGENT TUTOR™ Special Topics Series!

BUSINESS MATH II is a complete and self-contained course designed especially for students and others engaged in self-study. It will allow you to work at your own pace, using easy to follow tutorials and problem solving exercises.

BUSINESS MATH II was designed by math educators, and is comprehensive yet simple to use. It covers all the topics normally taught in a one-semester course in advanced business mathematics. Our goal is to build your math skills and make you more confident about using math in business and financial settings.

The lessons in BUSINESS MATH II 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 program.

NOTE ON FINANCIAL TABLES NEEDED TO SOLVE PROBLEMS

Many of the problems in this program require you to refer to tables such as amortization tables, present value tables, and compound interest tables. You can access all of these tables from within the program as follows:

- Open the "Help" menu at the top of the screen
- Select "View Tables"

A pdf document containing the tables will appear. It can be minimized and moved so you can refer to the lesson window while using the tables.

The Recordkeeping System

This program's recordkeeping system gives teachers a powerful tool for monitoring each student's use of the program. Before it can be used, the teacher must create a student list of one or more names. The instructions for doing this, and for using the other features of the recordkeeping system, are found starting on page 10.

Topics Covered

MATHEMATICS OF BUYING
Invoices and Trade Discounts
Single Discount Equivalents
Cash Discounts: Ordinary Dating Method
Cash Discounts: Other Dating Methods

MATHEMATICS OF SELLING
Markup on Cost
Markup on Selling Price
Markdown
Turnover and Valuation of Inventory

SIMPLE INTEREST
Basics of Simple Interest
Finding Principal, Rate, and Time
Simple Discount Notes
Discounting a Note Before Maturity

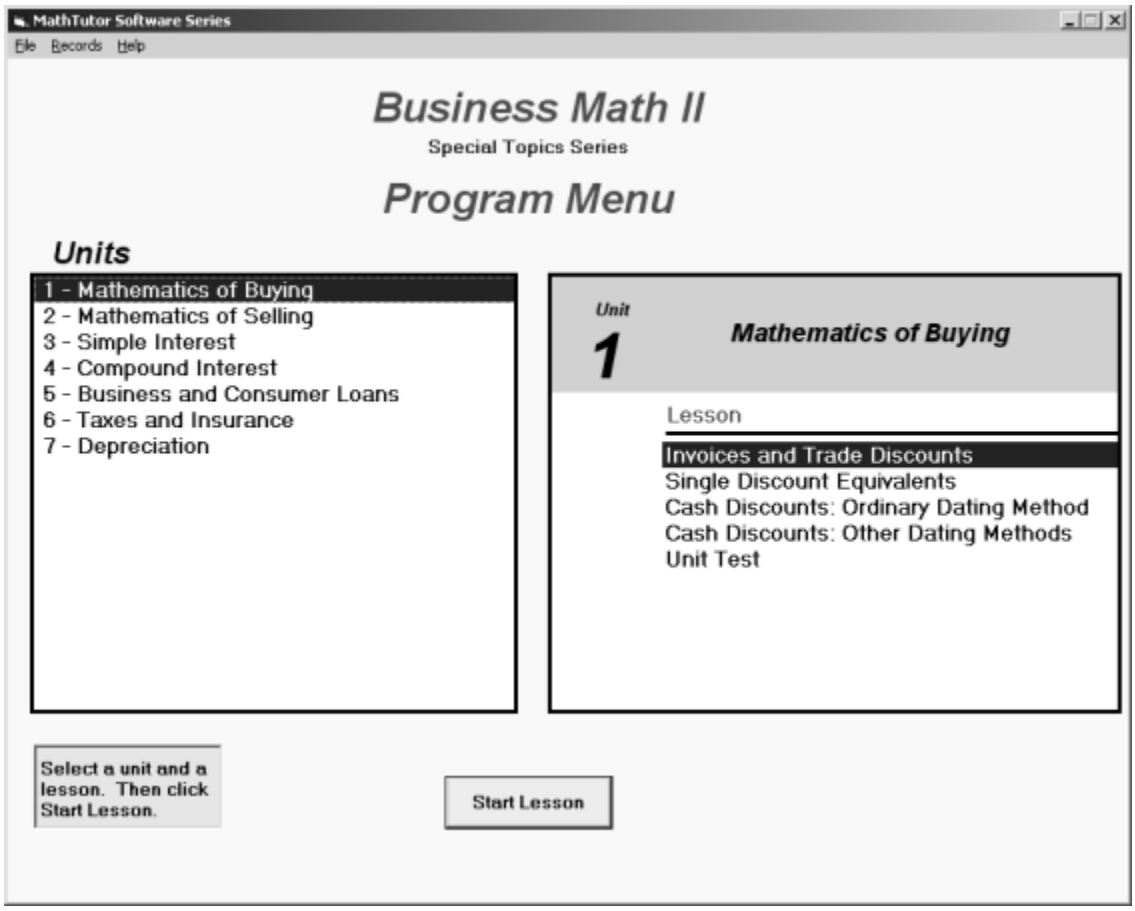
COMPOUND INTEREST
Compound Interest
Savings Accounts: Daily Interest
Present Value

BUSINESS AND CONSUMER LOANS
Open End Credit and Charge Cards
Installment Loans
Early Payoffs of Loans
Personal Property Loans
Real Estate Loans

TAXES AND INSURANCE
Property Tax
Personal Income Tax
Fire Insurance
Motor Vehicle Insurance
Life Insurance

DEPRECIATION
Straight Line Depreciation
Declining-Balance Method
Sum-Of-The-Years Digits
Units-of-Production Method
MACRS Method

Using the Program



The program menu (shown above) is the starting point for your study of business math. 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!

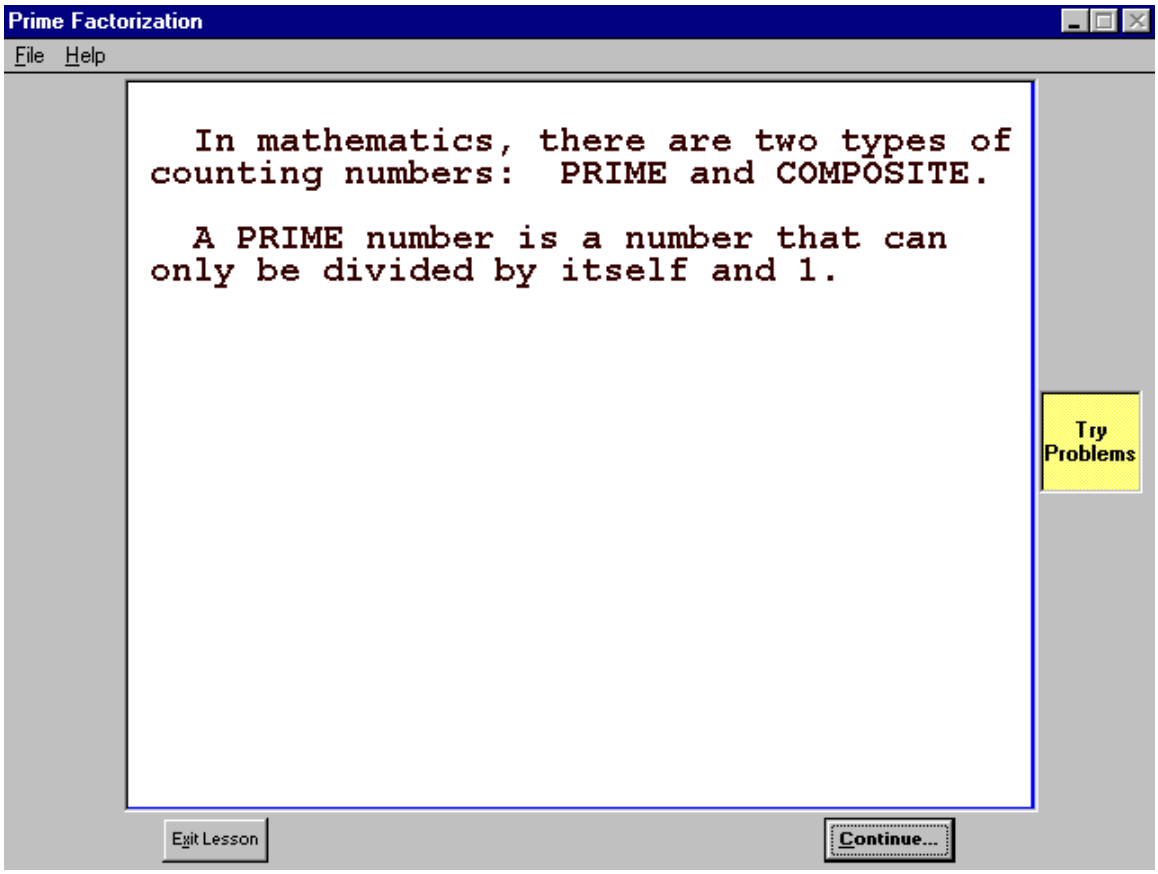
The beginning student is encouraged to work the chapters and lessons in order. But the program gives you the freedom to study the lessons in any sequence you wish.

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. It is explained later in this manual.

Working a Lesson

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**".

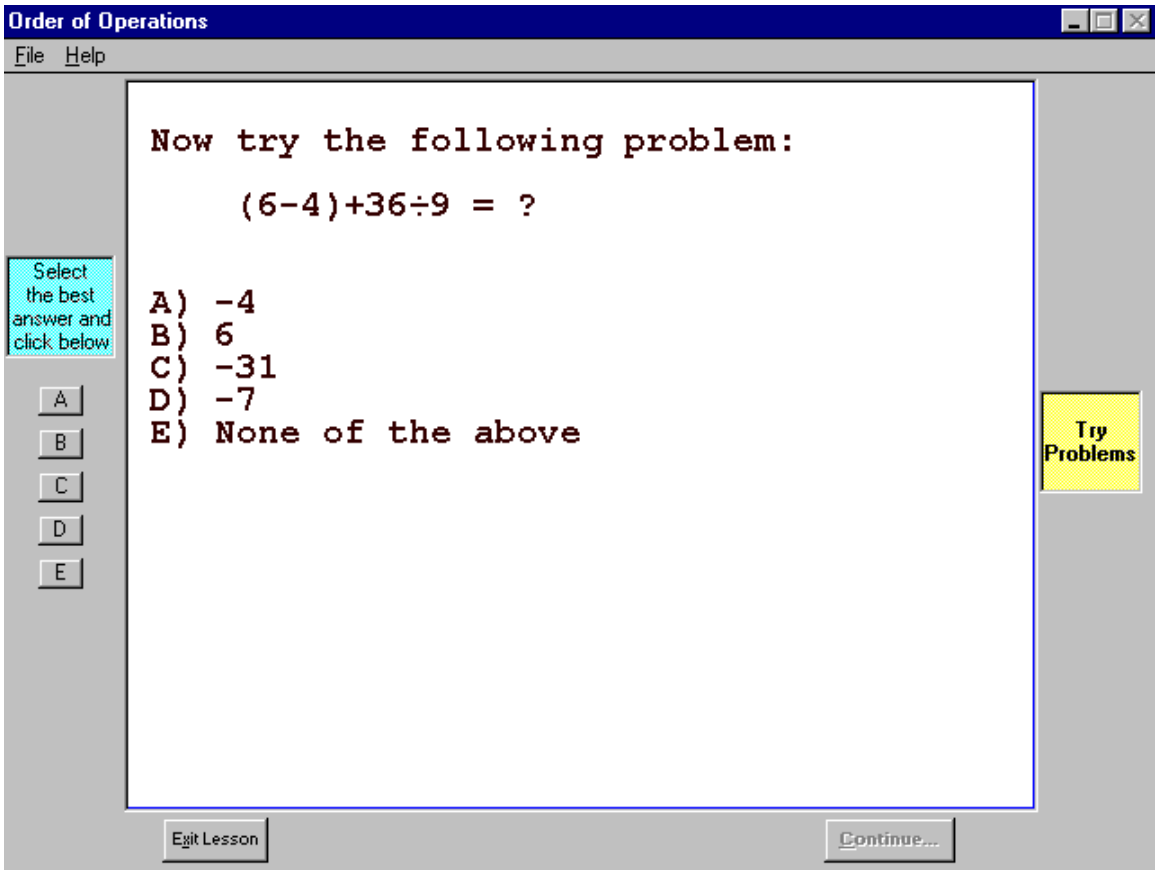
Most lessons have a similar format. First, the main concepts and ideas are presented. Then, one or more examples are presented to illustrate the concepts. After seeing these you will be asked if you would like to see another example. If you click "Yes" you will be shown another example. You will be able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



Here's a tip: When you are in a lesson, if you wish to go straight to solving problems click the "Try Problems" button in the right margin.

Working a Lesson (continued)

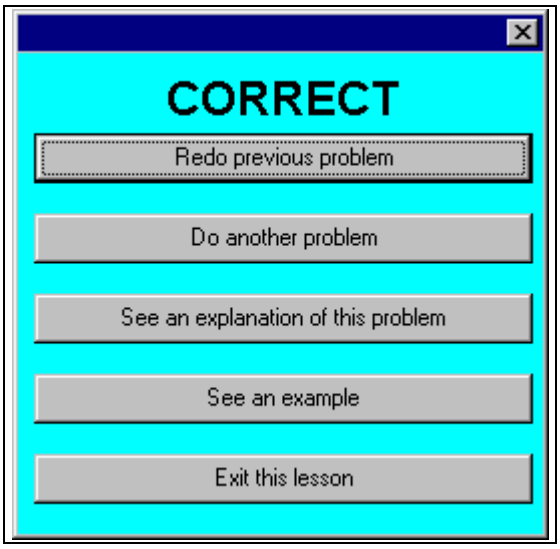
Trying to solve problems is one of the best ways for you to build your math skills, so we encourage you to spend some time on problem solving in each of the lessons you study. After trying a problem you'll have a chance to see the program solve the problem you just tried.



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.

Working a Lesson (continued)



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

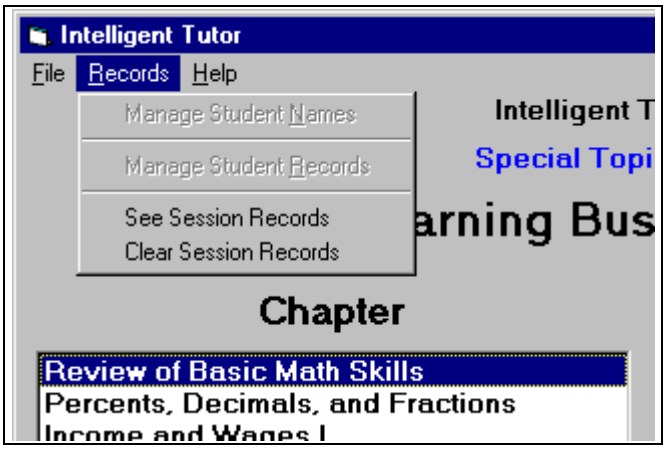
Most of the choices are self-explanatory.

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**".

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

Looking at Your Performance in the Current Session

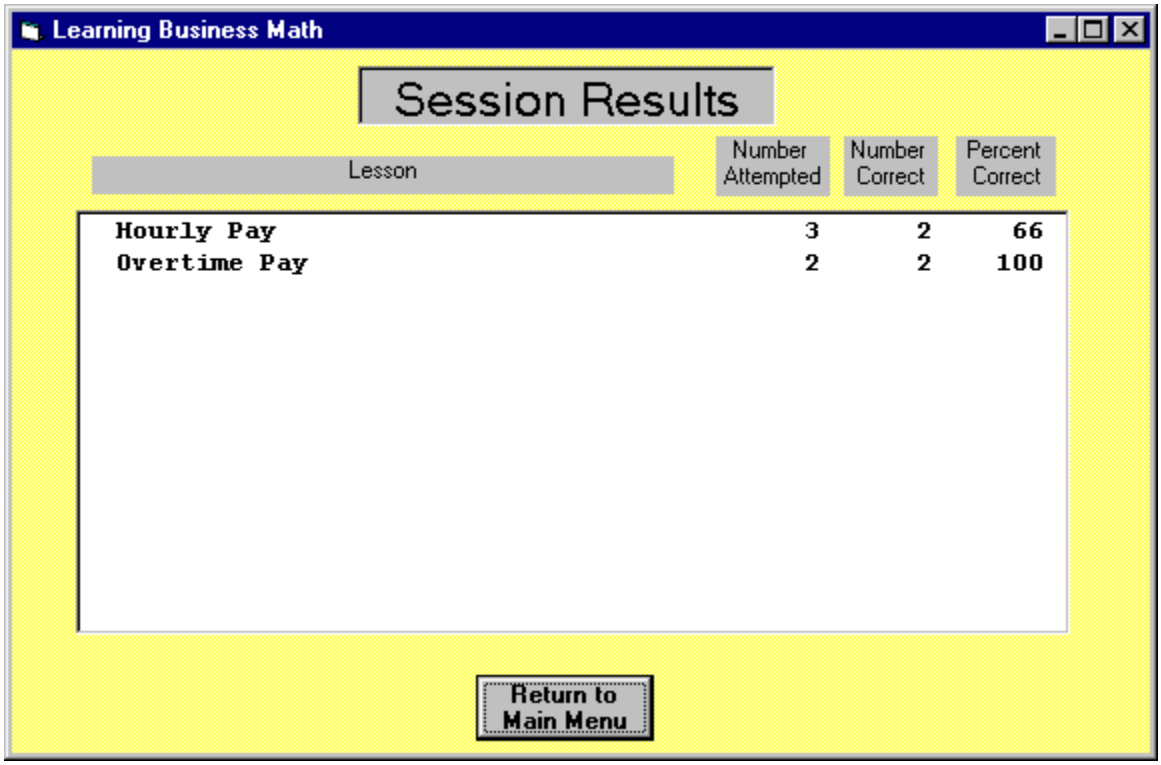


The **RECORDS** menu allows you to see your performance during the current session.

Select "See Session Records" to see your performance.

Select "Clear Session Records" to erase this sessions records.

The screen below shows how the current session's records are displayed.



The Recordkeeping System

Overview

This program's recordkeeping system provides teachers with 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

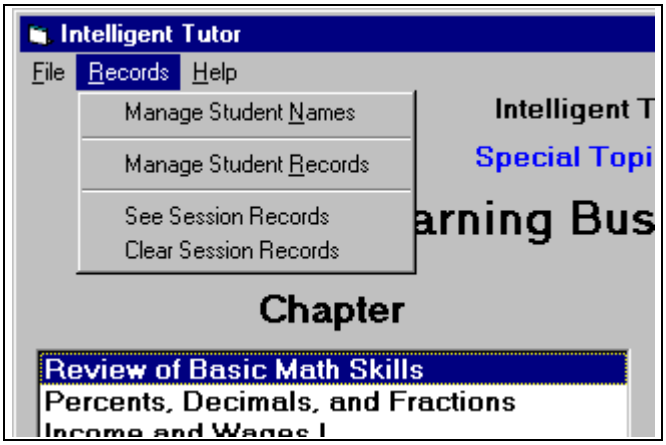
The teacher can use the recordkeeping system at any time to view this information. The teacher will see a list of the lessons each student has studied, the dates on which they used the program, the number of minutes spent in each lesson, and the student's performance in solving problems in each lesson. 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 <u>are not designed for network or site license use</u>. 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 <u>not</u> 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.

