

USER'S GUIDE

Nothin' but the Facts Pre-Algebra Skills v2.1

A Computerized Algebra Practice Program
On Signed Numbers (Integers)

(for Windows)

IEPMath
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Table of Contents

	Introduction	7
	Philosophy & Goals	
	Who We Are	
	Getting to Know You	
	Program Format	
	Product Support	
1.	Getting Started	9
	Installing the Program	
	Starting the Program	
	Signing In	
	Options	
	How About a Quick Tour?	
2.	Selecting an Activity: The MAIN MENU	11
	What Are the Activities?	
	Choosing an Activity	
3.	Choosing a Problem-Type: The Subject Menu	13
	What Are the Problem-Types?	
	Choosing a Problem-Type	
4.	The REVIEW ACTIVITY	15
	Getting to the Review Activity	
	Overview	
	Objectives	
	Instructions	
	Study Questions	
	Hints	

5.	The PRACTICE ACTIVITY	17
	Getting to the Practice Activity	
	Overview	
	Objectives	
	Instructions	
	Study Questions	
	Hints	
6.	The DRILL ACTIVITY	19
	Getting to the Drill Activity	
	Overview	
	Objective	
	Instructions	
	Study Questions	
	Hints	
	Exiting the Drill Activity	
7.	Finishing Up	21
	Generating More Problem Sets: The <i>More</i> Button	
	Finding Out How Well You Performed	
	Printing the <i>Certificate of Mastery</i>	
	Exiting the Program	
	Starting Over	
	On-Line Help	
8.	Academic Version	22
	Introduction	
	One Computer, One Class	
	Two or More Computers, One Class (Lab Pack)	
	One Computer, More than One Class	
	Two or More Computers, More than One Class	
	 Getting Started	
	Loading the Program	
	Creating Classes	
	Opening a Class (Displaying a Class's Roster)	
	Enrolling Students	
	Correcting Errors (Editing)	

Reporting

Quick Access Information (Displayed on *Student Management* Screen)

Daily Session Reporting (Displayed on *Detailed Information* Screen)

Using the Reports

Printing

Printing Class Daily Reports

Printing Student Daily Session Reports

Deleting

Removing Students From a Class or Group Roster

Removing a Class or Group

Options

Student Management Button

Program Password

Appendix A: The *Quick Tours* 28

Appendix B: Integer Algebra Skill Areas With Examples 31

Appendix C: Interface Commands 33

Legal Statements 34

Credits 35

Minimum Requirements

Minimum Computer Standards: NOTHIN' BUT THE FACTS: Pre-Algebra Skills v2.1 can be used on any PC or IBM compatible computer with a minimum of the following: 486 DX/2, 66MHZ, 6MB RAM, Super VGA Video Card, and a 3.5" Floppy-Disk drive. It occupies 8 MB of Hard Disk space. The program runs on Windows 3.1/95/98. To print Certificates of Mastery, an HP Laser-compatible printer is required. Windows compatible sound card (optional).

Minimum User Skills: The user (student) of this program needs only minimal computer keyboard and/or mouse skills. Most commands can be accessed by pointing and clicking. (See Interface Commands in Appendix C). The program is user-directed with instructions provided on-screen for each menu and activity screen.

User Age: 10 to Adult.

Minimum Math Level: Preparation for Algebra. Method of solutions and examples accessible on-screen.

Features

- Complete review, practice, and drill program to assist elementary algebra students in gaining competency and mastery in the basic integer (signed number) operations.
- Math content covering the following algebraic **integer skills**:
 1. **opposites**
 2. **absolute values**
 3. **addition**
 4. **subtraction**
 5. **multiplication**
 6. **division**
 7. **combined operations**
 8. **working with parentheses**
- A Review Activity that emphasizes memorizing the basic operations by using the mouse to drag and drop.
- A Practice Activity that tests accuracy by typing in answers and receiving immediate feedback.
- A Drill Activity that challenges for mastery by offering timed problem sets of increasing difficulty.
- Examples readily available on-screen by a single mouse click.
- Unlimited number of randomly-generated problem sets.
- Printed personalized Certificates of Mastery.
- Performance reports that summarize total time and problems missed on the Practice and Drill Activities.
- Easy to complex problem types (up to five integers per problem).

Introduction

Philosophy & Goals

Welcome! **Nothin' but the Facts: Pre-Algebra Skills v2.1** is a program that will assist you in reviewing, practicing, and mastering the algebraic skills of opposites, absolute value, and basic operations with integers. It makes use of the time-proven system of learning these skills by rote and drill via use of the computer. The computer allows you to quickly access skills for study, provides a variety of activities for your interaction and learning, gives you immediate feedback, keeps track of your progress, and advances you to mastery.

It is the philosophy of **IEPMath** to meld the time-proven methods of teaching mathematics with the stimulating, responsive, and tracking capabilities of today's computing. In a search to find methods which are fun and stimulating, many products today fail because they do not emphasize learning the basic skills. Instruction *through the ages* has demonstrated that learning mathematics involves hours of practice and drilling. NBTF provides an unlimited number of drill and problem sets within a variety of activities that will stimulate and motivate you in your pursuit of mastery.

The goals of NBTF are to assist and direct you to:

- Master the basic algebraic skills of integer operations.
- Demonstrate competence in working both mentally and within a set time period problems that range from simple to complex.
- Gain confidence and maturity that will enable you to learn more advanced mathematical concepts with ease.

Who We Are

IEPMath is an educational software company of teachers and educators whose goal is to create high quality instructional materials that consist of an interactive, self-discovery, learn and mastery orientation. Our purpose is to provide instructional curriculum that meets the needs of a variety of students, teachers, parents, schools, and communities in a manner which is comprehensive, effective, and easy to use.

For further information: Call (909) 880-0820 or write:

IEPMath

PO BOX 54

Lytle Creek, CA 92358

Getting to Know You

We at **IEPMath** are interested in knowing about you. Please fill out the enclosed Registration Card (inserted at the back of this manual), and tell us about your needs and what you think about **NOTHIN' BUT THE FACTS!** If you will fill out and mail to us this pre-stamped and self-addressed card, we will:

- Send you information about our other educational software product
- Send you information regarding new versions of NOTHIN' BUT THE FACTS! as soon as they are available.
- Provide you with discounts on all of our products.

Program Format

The basic format of NBTF is quick access, simplicity, and ease of use. After signing in, you may then select one of the three main activities of NBTF.

- **Review Activity:** You will be provided six, randomly-generated problems. From the answer box, use the mouse to click, drag, and drop correct answers to the six problems. Immediate feedback is presented, and you may attempt each problem an unlimited number of times. A screen of examples is just a mouse click away!
- **Practice Activity:** You will be asked to answer problems on six cards that are flashed to you at random. Immediate feedback is provided as you work problems until all the cards of the set are answered correctly.
- **Drill Activity:** For problem sets of ten, you will be asked to demonstrate competency by answering all the problems correctly within a set period of time. The objective is to attain mastery of your skill level by progressing through six of these sets of increasing difficulty.
- **Reference:** Commonly used integer definitions.

Product Support

Product Support is available to registered users through the Internet and America Online. You may also call 909-880-0820 and leave a message.

Internet

Email: support@iepmath.com

America Online

Screen Name: **IEPMath**

1. Getting Started

Installing the Program

Step 1: [Windows 3.1]: In the Program Manager, go to the **File** menu and select **Run**.
[Windows 95 and 98]: From the START menu, select **Run**.

Step 2: In the Command Line box, type the letter for your computer's floppy drive, followed by , :**SETUP.EXE** (for example A:\SETUP.EXE)

Step 3: Follow the Setup program instructions.

Starting the Program

[Win 3.1]

1. If the **Program Manager** window is not open, double-click (left button) the **Program Manager** icon.
2. Double-click on the **IEPMath** icon from the Program Manager.
3. Double-click on the **IEPMath Pre-Algebra Skills v2.1** icon to start the program in the IEPMath Group window.

[Win 95/98]

1. From Desktop, click Start and then Programs.
2. From the Programs menu, find and click the IEPMath directory and then select **IEPMath Pre-Algebra Skills v2.1**.

SIGNING IN

The Sign-In Screen

The Sign-In Screen is where we welcome you to our program and ask that you type in your name and press <Enter>. You can use up to ten letters in typing your name. This will identify you to the computer so that it can communicate to you throughout the program by name.

OPTIONS

To access the Options Menu, select OPTIONS from the MAIN MENU or press the F8 key anywhere within the program.

Sound Settings

If you have a sound card that is configured properly for Microsoft Windows you have the option of hearing sound in NBTF Pre-Algebra Skills v2.1. Click on the SOUND EFFECTS checkbox to enable/disable sound.

Selecting Certificate Color

If you have a color printer, you will be able to select different border colors to print out your Certificates of Mastery. Select a color for either **Color #1** or **Color #2** and press the **Test** button to preview the certificate.

Drill Times

You can change the drill times for each Subject. Drill times are represented in seconds and can be any value between 1 and 999. To turn the time limit off, simply click on the checkbox next to the level.

How About a Quick Tour?

Why not take a few quick tours before becoming too immersed in the program? There are three tours listed in an easy-to-use format in Appendix A of this User's Guide. Each is about 5 minutes in length and will give you a good introduction to the three main activities of this program.

2. Selecting an Activity

What Are the Activities?

The Main Menu

At this point in the program, you are to choose which of the three main activities you wish to work on. In learning the basic algebraic operations, it is suggested that you focus on the skills in the order in which they are presented here. **Pre-Algebra Skills v2.1** is not intended for use as the primary means of instruction. Please take the time to study any textbook, notes, study guides, assignments, etc., before working with this software. The purpose of NBTF is to assist you only in reviewing, practicing, and drilling.

The following is a summary of each activity. Once you have chosen an activity, you may refer to the section of this *User's Guide* that covers that activity for objectives, study questions, instructions, and study hints.

The Review Activity

To begin reviewing the skill selected, you will click on the **Examples** button to see the solution steps and some worked-out problems. Then you will work out each problem presented and choose what you think is the correct answer by using the mouse to click, drag, and drop. Examples are just a mouse-click away! After answering each of the six problems, click on **More** for six additional problems. Problems are randomly generated and no two problem sets are identical.

The Practice Activity

To begin practicing the skill selected, you will click on the **Examples** button to see the solution steps and some worked-out problems. You will gain confidence and competency in the skill being studied by answering numerous problems randomly presented for your practice. Upon answering each problem, immediate feedback is displayed. If the answer is correct, the problem is placed into the Mastered Area. If the answer is incorrect, the problem is placed back into the Unmastered Area. It will remain there until it is presented again and answered correctly. After answering each of the six problems, click on **More** for six additional problems. Problems are randomly generated and no two problem sets are identical.

The Drill Activity

In the Drill Activity, you will build mastery by challenging yourself to answer timed problem sets of ten problems with 100% accuracy. If you do not master all ten problems, you will be presented a brief report of the problems answered correctly and the problems answered incorrectly (with correct answer); then ten more problems will be generated and you will be able to try that level again. Problem sets will continue to be generated until you have answered all ten problems correctly within the set time limit. Upon mastering a level, you will be rewarded with a Certificate of Mastery!

Choosing an Activity

To select an Activity from the Main Menu:

Type the first letter of the word, or click on the button of the Activity that you wish to choose.

To change to another activity, at any time within the program, click on Main Menu, and choose another activity.

3. Choosing a Subject

What Are the Subjects?

The Subject Menu

At this point in the program, you are to choose which algebra skill you wish to work on. **Pre-Algebra Skills v2.1** focuses on each of the following skills within each activity: (see Appendix B for a quick reference guide)

Opposites & Absolute Values

Absolute Value: Examples and problems consist of a single integer placed within a set of absolute value symbols. Skill includes two problem types: no sign preceding the absolute value symbols and a negative sign preceding the absolute value symbols.

Identify: Examples and problems consist of a single integer placed within a set of parentheses. Skill includes two problem types: no sign preceding the parentheses and a negative sign preceding the parentheses (opposites).

Combinations: Problem sets consist of a random selection of problems from each of the previous two skills sections.

Algebraic Addition of Integers

Same Signs: Examples and problems consist of two integers each placed either outside or within a set of parentheses. The integers are either both positive or both negative.

Different Signs: Examples and problems consist of two integers each placed either outside or within a set of parentheses. The integers have opposite signs with respect to each other.

Three Integers: Examples and problems consist of three integers each placed either outside or within a set of parentheses.

Algebraic Subtraction of Integers

Two Integers: Examples and problems consist of two integers each placed either outside or within a set of parentheses. The integers are separated by a subtraction sign.

Three Integers: Examples and problems consist of three integers each placed either outside or within a set of parenthesis. The integers are separated by addition and/or subtraction signs.

Using Parentheses: Examples and problems consist of the sum or difference of an integer and the sum or difference of two other integers placed within a set of parentheses.

Multiplication, Division & Combined Operations

Two Integers: Examples and problems consist of two integers placed either in adjacent sets of parentheses (indicating multiplication) or in parentheses separated by a division sign. The integers are of either the same or different signs.

3 or More: Examples and problems consist of three to five integers placed in adjacent sets of parentheses (indicating multiplication).

Combined Operations: Examples and problems consist of a combination of the operations of addition, subtraction, and multiplication.

Choosing a Subject

Click on the name of the algebra skill you wish to study (its button will light up) to make a selection from the Subject Menu.

To change to another algebra skill, at any time within the program, click on Subject Menu, and choose another skill. Please note that when you leave the Review or Practice Activities, the program does not track your progress. Upon re-entering either of these activities, you must begin again. However, within the Drill Activity, the program will track your progress. If you wish to leave the activity to perform review, upon your return to the Drill Activity, you will be able to pick up where you left off. Please note that when you exit the program, even within the Drill Activity, the tracking is discontinued.

4. The REVIEW ACTIVITY

Getting to the *Review Activity*

From the Main Menu, click on Review or type **R**. Next, from the Subject Menu, click on the algebra skill you wish to review.

Overview

In this activity, after studying the examples, for each problem presented in the Question box, you will be asked to select, click, drag, and drop a number from the Answer box that you believe is the correct answer. If you are incorrect, the number will automatically return to its original location in the Answer box, and you then attempt another number. If the correct number is clicked, dragged, and dropped, it will be retained as the answer to the problem.

Objectives

After performing the Review Activity for each algebra skill selected, you will have:

- Memorized the basic steps of solution.
- Demonstrated accuracy in the solving of problems by providing the correct answers from a listing of possible answers.
- Determined how a change in sign can affect the outcome when comparing two similar problems.

Instructions

Upon arriving in the Review Activity,

1. Click on Examples to review methods of solution and examples of problems of the algebra skill selected. To return to the problems within the activity, simply press any key. Don't be afraid to click on Examples when you have the slightest doubt as to methodology.
2. Work out a problem from the Question box. (It is not necessary to work the problems in order.) Use pencil and paper for the more difficult problems.
3. Select a number from the Answer box. Using your mouse, place the arrow on-screen over the number that you feel correctly answers the problem. Click with the left mouse button. Without releasing that button, move the number (by moving your mouse) to a location directly to the right of the problem. Then release your finger from the left button.

4. If the answer is incorrect, the number will move, on its own, back to its original location within the Answer box. Evaluate what you may have done incorrectly. Rework the problem. Select another number from the Answer box and try dragging and dropping it to the right of the problem. Keep trying until you find which of the numbers is that problem's correct answer.
5. If the answer is correct, the number will be retained and not move back to its original position. Note the reinforcement at the bottom of the screen. Make note of all the factors that you had to take into account and your correct solution of that problem.
6. Progress on to other problems until you have answered each of the problems correctly.
7. Click on More to obtain a new problem set.

Study Questions

The following are questions to help guide you through your learning of the algebra skills within the Review Activity. For each skill selected, try to answer these questions:

- What are the symbols (operations signs, parenthesis, vertical bars, etc.) of the problems of this skill-type that I can recognize when I see them?
- What kinds of problems are contained within this skill level? How do they differ from one another?
- How do problems of this skill-type differ from problems of other but similar skill-types?
- What are the steps of solution for problems of this skill-type?
- How do individual sign changes within the problem affect the answer?

Hints

Repeated review facilitates learning--the more problems you do, the better math student you will be. When you answer a problem, take the time to determine what you did correctly and what you did wrong. Learn from your mistakes. No one will know but you how many errors you made! Your simple goal is improvement.

Take your time. Relax. Have Fun!

The More Button

After completing a problem set, you are encouraged to try another problem set by clicking on More. This will randomly generate another six problems. You are encouraged to do this for as many times as you wish. No two problem sets will be the same.

5. The PRACTICE ACTIVITY

Getting to the *Practice Activity*

From the Main Menu, click on Practice or type **P**. Next, from the Subject Menu, click on the algebra skill you wish to practice.

Overview

There are two main areas of the Practice Screen--the Unmastered Area and the Mastered Area. The activity begins with six problems of the algebra skill that has been selected located in the Unmastered Area. Problems are then presented at random for answering. Correctly answered problems are placed in the Mastered Area, and those answered incorrectly are returned to the Unmastered Area to be randomly selected again. There are no time limits; however, the total time it took to complete the problem set will be displayed.

Objectives

After performing the Practice Activity, you will have:

- Determined the correct answers to problems previously answered incorrectly.
- Learned the method of solution for each algebraic skill area selected.
- Answered problems for each selected skill with 100% accuracy.
- Developed confidence by correctly answering all problems of a problem set in a time faster than your previous, personal best.
- Demonstrated competency in that skill area by consistently answering problems correctly within a time period near your personal best.

Instructions

1. Click on Examples to review methods of solution and examples of problems of the algebra skill selected. To return to the problems within the activity, simply press any key. Don't be afraid to click on Examples when you have the slightest doubt as to methodology.
2. Type in the answer to the problem presented.
3. Type <Enter> to see the correct answer and check if you were correct or incorrect.
4. Type <Enter> to see the next problem.

5. Work problems until all the cards have been relocated from the Unmastered Area to the Mastered Area.
6. After completing the problem set, take note at the bottom of the last screen of the total time it took you to complete the set.
7. Click on More to generate another problem set. Attempt to complete this set in a faster time than your previous best.

Study Questions

The following are questions to help guide you through your learning of the algebra skills within the Practice Activity. For each skill selected, try to answer these questions:

- What is the method of solution for problems of this skill-type?
- What is the order for which the problem is to be solved? Which part of the problem is to be done first, second, etc.?
- When you answer a problem wrong, how can you learn from it so that you do not make that same mistake again?
- How quickly can you complete the activity by getting all the cards to the Mastered Area?

Hints

- As you perform the problems, mentally review the steps for solving this problem-type.
- Think about how these problems differ from other similar problems; take the time to determine a strategy for how you will distinguish the difference.
- When you get completely stuck, click on Examples to see the complete method of solution and examples.
- Don't be afraid to make a mistake. When you do, determine why you missed the problem and try not to make the same mistake the next time.

The More Button

After completing a problem set, you are encouraged to try another problem set by clicking on More. This will randomly generate another six problems. You are encouraged to do this for as many times as you wish. No two problem sets will be the same.

6. The DRILL ACTIVITY

Getting to the Drill Activity

From the Main Menu, click on Drill or type **D**. Next, from the Subject Menu, click on the algebra skill you wish to drill.

Overview

You will be presented ten problems (one at a time) that you must answer as quickly as possible. If you answer all ten correctly within the time limit, you will earn a Certificate of Mastery!

Objective

After completing the Drill Activity, you will have demonstrated mastery for that algebraic subject area by answering all problems correctly within the time limits.

Instructions

1. Note the time limit for each level's problem set.
2. Type <Enter> to begin the set.
3. Type the answers as quickly as possible.
4. If you wish to change an answer, before typing <Enter>, use <Backspace> to erase the entry. Retype the answer.
5. After answering, type <Enter> for the next problem.
6. After you have answered the ten problems of each level, you'll be presented feedback regarding:
 - Number of problems answered correctly.
 - Time taken for that problem set.
 - Whether you need to redo that level.
 - Any problem answered incorrectly, your answer, and the correct answer.
7. Type <Enter> to either redo the current level or progress to the next level.

8. When you have mastered a level, the Certificate button will appear. If you wish to print a personalized Certificate of Mastery, make sure that your printer is turned on and click on Certificate.

Study Questions

The following are questions to help guide you through your learning of the algebra skills within the Drill Activity. For each subject selected, try to answer these questions:

- Does performing problems quickly make you more confident and competent?
- Since it is not important how many times you attempt a problem set, can you see how by trying over and over again, you gain competency?
- At the end of the problem set, if you missed problems, can you see why you made your errors? What will you remember about these errors so that you will not make similar errors again?

Hints

- Use the Number keys for quicker answering.
- First step: make note of the signs.
- Work as quickly as possible.
- When answering, double check the sign of the answer.
- If you do not answer all of the problems correctly and/or if you go over the time limit, simply redo another problem set within that level.
- Keep working; reward yourself for making improvements

Exiting the Drill Activity

If you leave the Drill Activity to review, practice, or try another subject area, upon returning to the Drill Activity, you will automatically be advanced to the level from which you left. Please note that when you exit the program or choose New User, you will have to begin at Level 1 when you return to the Drill Activity.

When you have completed this activity, click on Main Menu or Subject Menu.

7. Finishing Up

Exiting the Program

You may exit the program by selecting EXIT from the MAIN MENU or by pressing the <ESC> key. You will be given the option to exit immediately or return to the Sign-In screen.

On-Line Help

At any time when the program is running, on-line help is available by pressing <F1>. A Help dialogue box will appear with the chapter headings of this User's Guide. By clicking on any chapter, the subheadings of that chapter will appear. By clicking on any subheading or any word that is written in green, the text of that subheading or term will appear. This On-Line Help performs all functions similar to any Microsoft Help file.

For additional function-key commands and other mouse and keyboard commands, see Appendix C.

8. Academic Version

Introduction

Welcome to NOTHIN' BUT THE FACTS Pre-Algebra Skills (NBTF)—Academic Version! The NBTF-Academic Version consists of the NBTF Program (to be used by the students) and the NBTF Student Management Program (to be used by the teachers or their assistants). The programs are to be used in tandem so that the performance of each student can easily be recorded and tracked. The purpose of this NBTF Academic Version is to enable teacher time to be spent more efficiently instructing students and student time to be spent learning basic skills.

This *Academic Version* can be used in a variety of computing situations:

ONE COMPUTER, ONE CLASS

Load the program on the one computer, create the class, enroll the students. Additionally, if you have students working in pairs, create a special class and enroll students as pairs (i.e. Bob & Mike). Or you may want to create special classes for teams formed for competition or more efficient record keeping. All records can be downloaded daily and uploaded to another computer with NBTF Academic Version already loaded.

TWO OR MORE COMPUTERS, ONE CLASS (LAB PACK)

Load the program on all computers. Carefully determine which students will be working on each computer. Caution, NBTF cannot keep one set of records for any student who works on more than one computer--unless the computers are networked! Therefore number the computers and assign students to a number. On each computer, create the class and enroll the students who will be using that computer. All records can be downloaded daily and uploaded to another computer with NBTF Academic Version already loaded.

ONE COMPUTER, MORE THAN ONE CLASS

Load the program, create the classes, enroll the students to their prospective class. Records for each class can be downloaded daily and uploaded to another computer with NBTF Academic Version already loaded.

TWO OR MORE COMPUTERS, MORE THAN ONE CLASS:

Load the program on all computers. Each teacher needs to determine which students will be working on each computer. Then, each teacher on each computer needs to create the class and enroll those students that will be working on that computer. Caution, NBTF cannot keep one set of records for any student who works on more than one computer--unless the computers are networked! Therefore number the computers and assign students to a number. All records

can be downloaded daily from each computer and by class and can be uploaded to another computer with NBTF Academic Version already loaded.

(Alternative): If the situation requires a student to work on a computer different from the one normally assigned to him, enroll him on the new computer. Then at the end of the day, print out his session report and keep in his files.

Getting Started

LOADING THE PROGRAM

Insert the NBTF Floppy into your Floppy Disk Drive and from the Program/File manager in 3.x, or the start button in Win95, run SETUP.EXE. Follow the directions as instructed.

After the introduction music, the Academic menu will ask you to enter a course and student(s) before running the program. First, enter your unique password and confirm (use the tab key) and then enter.

IMPORTANT: After the initial enrollment, you may gain access to the student management program by double-clicking on Student-Management from the IEPMath group window, or from the sign-in screen press F10 (optional button may be shown on bottom of screen).

CREATING CLASSES

1. Click on **File** (upper left-hand corner)
2. From the **File** drop-down menu, click New.
3. Type in a name for the class or group to be created (i.e. Room T-4 or Red Group)
4. Press <Tab> to move cursor from one field to another.
5. Type in the name of the instructor.
6. If everything was entered correctly, click **Save**; if not click **Cancel**.

OPENING A CLASS (Displaying a Class's Roster)

1. Click on **File** (upper left-hand corner)
2. From the **File** drop-down menu, click Open
3. Click on the class to be "opened".

ENROLLING STUDENTS

1. From the Student Management screen, click on **Enrollment**.
2. From the Enrollment drop-down menu, click **Add**.
3. Type in a number; you may use up to nine digits. (most schools simply start with 0001 and continue from there) No number can be repeated, and if a number has been previously used, a dialogue box will state that "student numbers need to be unique". Choose another number. It may be a good idea to keep a "last

number used" note nearby for future student enrolling. Nine digits also work well for social security numbers.

4. Press <Tab> to move the cursor to the First Name, Last Name, and box preceding Enable Password. A password is optional and can be left blank. If a password is to be used--it can be added later, click on the box preceding Enable Password. Then type in the student's password. An enabled password requires that the password be used for that student before he/she enters the program.

5. If everything was entered correctly, click on Enroll; if not click Cancel and begin again.

CORRECTING ERRORS (Editing)

1. Open the class and click on the student whose information requires editing.
2. Click on **Enrollment** (second from upper-left corner).
3. From the **Enrollment** drop-down menu, click **Edit**.
4. Use the mouse to click and make changes and editing.
5. When finished, click **Save**.

Reporting

DAILY SESSION REPORTING (Displayed on *Detailed Information Screen*)

NBTF keeps precise session reports for each and every activity that a student performs within the program. You may choose a Daily Report for any day for which the student worked from the day of the student's enrollment. To access the reports:

1. From the Student Management screen, click on the name of the selected student--it will be highlighted.
2. Click on View and then Detailed Information(at top, third from upper-left corner). [Shortcut – Double click on the student's name.]
3. A report for that student for that day will appear. If the student did not work in the program that day, it will indicate that there is nothing to report.
4. The days in which the student used the program are in red. A maroon color indicates a selected report, and blue is a date selected with no report available. To change to a previous month, click the left arrow at the top of the calendar; to change to the following month, click the right arrow at the top of the calendar. To view a student's report for any day for which he/she worked, click on that day on the calendar (in red).

5. When the calendar appears, it must disappear before printing or returning to the Main Menu. It will disappear only when one of its dates is clicked.

For the activities, the time is given in minutes and seconds. The time within the Summary box is given in hours and minutes. If a student logs out, and then logs back in, a second session report will be provided for that day. To print any report, click on Print at the bottom of the screen. To return to the Student Management screen, click on Done.

USING THE REPORTS

Depending upon the learning situation, the reports can be used in a variety of ways. It is suggested that students be given directions or assignments as to which parts of the program should be worked. For example, students should begin by spending time reviewing skills in which they are proficient to reinforce their competency. Once an entire subject has been mastered, then users should select the Drill activity for that subject and skill level.

Students should end up each session within the Drill Activity. It is the level attained within the Drill Activity that gives a true scorecard of the student's competency in the basic facts. This scorecard can be easily displayed by the Quick Access reports displayed on the Student Management screen when each student's name is clicked.

Write objectives for the class in your lesson plans and specific behavioral objectives in each student's educational plan by stating:

- In the Review Activity, the student(s), by a certain date, will have accumulated "x" hours in the learning of a certain subject.
- In the Practice Activity, the student(s), by a certain date, will answer 24 problems of a certain type correctly in "x" minutes, or
- In the Drill Activity, the student(s), by a certain date, will obtain a certain level (see Appendix C of User's Guide), by answering with a 100% accuracy problems of a certain type.

Printing

PRINTING CLASS DAILY REPORTS

You may have printed your class's roster that includes a summarized Daily Report for each student. For each student, it will list the lowest scores and date within the Drill Activity, and the highest level attained.

To print a Class Daily Report, from the Student Management screen, choose a subject (at top), click on File, and from the File drop-down menu, click on Print. Then verify that your printer is on-line, and select current subject, all subjects or roster.

Note: The students may be sorted by name, ID number, and by ascending order. The sort is available under View (3rd on the top menu).

PRINTING STUDENT DAILY SESSION REPORTS

From the Student Management screen, by clicking on a student and then clicking Detailed Information at the top of the screen, you will bring up that student's records for any day since his/her enrollment. For any report displayed, if you wish to print it, click on Print.

Deleting

REMOVING STUDENTS FROM A CLASS OR GROUP ROSTER

1. From the Student Management screen, click on the name of the selected student.
2. Click on Enrollment (top, second from upper-left corner).
3. From the Enrollment drop-down menu, click on Remove.
4. Confirm that you wish to delete by clicking on Yes.

Please note that when you remove a student that his/her records are permanently removed from NBTF. Before removing, you may wish to print a report of his/her records.

Also note, there is no way to transfer a student's records from one class or group to another. To do this, you may want to re-enroll him/her in the new group or class by using a middle initial or changing to a nickname; he thus will have two sets of records--one for each class or group.

REMOVING A CLASS OR GROUP

1. Click on File (upper-left corner).
2. From the File drop-down menu, click on Delete...
3. Click on class you wish to delete; or you may choose to delete all the classes.
4. Click Delete.

Warning!! By deleting any class, you are deleting all student data for students within the class. Please backup the data on a diskette before deleting!

OPTIONS

The *Student Management* Button will be shown at the bottom of the Sign-In screen if “show” is checked. If “show” is left unchecked, it can be accessed by pushing the F10 key. The button may be turned on or off from the *Options* menu in the Student Management program.

Also, the Program Password may be enabled or changed from the *Options* menu in the Student Management Program.

Appendix A: The *Quick Tours*

The following are three tours that when followed will provide a glimpse at each of the three activities of this program. To take a tour, simply follow the directions under the column heading **What To Do**.

Tour One (To the Review Activity) F1--On Line Help

STOPS	WHAT TO DO
1. The Sign-In Screen	Type in your Name; then type <Enter>.
2. The Main Menu Screen	Click on the Activity or type the first letter of that activity: <u>R</u> eview, <u>P</u> ractice, or <u>D</u> rill. (For Tour One, we'll choose <u>R</u> eview)
3. The Subject Menu Screen	Note that when you pass the cursor over the buttons (the skill names), the buttons are highlighted. Click on the algebraic skill that you wish to review. (For Tour One, we'll choose Absolute Values.)
4. The Review Activity Screen	<ol style="list-style-type: none">1. Click on Examples to see the methods of solution and examples.2. Work out the first problem from the Question Box.3. Use the mouse to click on the correct answer in the Answer Box (do not release), drag the number (move the mouse) to the problem's answer space, and drop (release). If you were correct, the number will stay; if you were incorrect, the number returns to its original location.4. Continue clicking, dragging, and dropping until all the problems are answered correctly.5. If you wish to generate another set, click on More.6. When you are finished, click on Subject Menu or Main Menu. (To return for the next tour, we'll choose Main Menu)
5. The Main Menu Screen	For Tour One, this will END OUR TOUR. Thank-you; we recommend Tour Two!

Tour Two (To the Practice Activity)

F1--On Line Help

STOPS	WHAT TO DO
1. The Sign-In Screen	Type in your Name; then type <Enter>.
2. The Main Menu Screen	Click on the Activity or type the first letter of that activity: <u>R</u> eview, <u>P</u> ractice, or <u>D</u> rill. (For Tour Two, we'll choose <u>P</u> ractice.)
3. The Subject Menu Screen	Note that when you pass the cursor over the buttons (the skill names), the buttons are highlighted. Click on the algebraic skill that you wish to review. (For Tour Two, we'll choose Addition of Integers--Same Signs.)
4. The Practice Activity Screen	<ol style="list-style-type: none">1. Click on Examples to see the methods of solution and examples.2. Type in the answer to the card displayed, then type <Enter>. Were you right or wrong?3. Type <Enter> again. (Note, the last card either is placed in the Mastered Area, or is returned to the Unmastered Area.) Continue answering cards until all cards are in the Mastered Area. Note that exhibited at the bottom of the screen is the total time taken to answer all six correctly.4. If you wish to generate another set, click on More.5. When you are finished, click on Subject Menu or Main Menu. (To return for the next tour, we'll choose Main Menu)
5. The Main Menu Screen	For Tour Two, this will END OUR TOUR. Thank-you; we recommend Tour Three!

Tour Three (To the Drill Activity) F1--On Line Help

STOPS	WHAT TO DO
1. The Sign-In Screen	Type in your Name; then type <Enter>.
2. The Main Menu Screen	Click on the Activity or type the first letter of that activity: <u>R</u> eview, <u>P</u> ractice, or <u>D</u> rill. (For Tour Three, we'll choose <u>D</u> rill.)
3. The Subject Menu Screen	Note that when you pass the cursor over the buttons (the skill names), the buttons are highlighted. Click on the algebraic skill that you wish to review. (For Tour Three, we'll choose Addition & Subtraction of Integers.)
4. The Practice Activity Screen	Read the instructions. Note the time limit for answering all ten problems. Type <Enter> when you are ready!
5. The Drill Problem Screen	Type in the answer to the problem presented as quickly as possible. (If you make a mistake, use the <Backspace> key before entering.) Then type <Enter>. Continue answering problems until you have answered 10.
6. The Drill Problem Set	Note the results of your performance for Summary Screen ten problems. For problems where you erred, note your answer and the correct answer. When you are finished, click on Subject Menu or Main Menu. (To return, we'll choose Main Menu).
5. The Main Menu Screen	For Tour Three, this will END OUR TOUR. To exit, choose New User or type <Esc>. Thank you and good luck with NOTHIN' BUT THE FACTS!

Appendix B: Integer Algebra Skill Areas With Examples

The following, by use of examples, is a glimpse of the content of **Pre-Algebra Skills v2.1**

Opposites & Absolute Values

Absolute Value:

$$|2| = 2$$

$$|-2| = 2$$

$$-|-5| = -5$$

$$-|18| = -18$$

Identify:

$$-(5) = -5$$

$$-(-7) = 7$$

$$-(0) = 0$$

$$(12) = 12$$

$$(-8) = -8$$

$$(0) = 0$$

Combinations

$$-|-3| = -3$$

$$-(-12) = 12$$

$$-(9) = -9$$

$$|-11| = 11$$

Algebraic Addition of Integers

Same Signs

$$(-5) + (-7) = -12$$

$$9 + 22 = 31$$

$$-4 + (-5) = -9$$

$$(5) + (9) = 14$$

Different Signs:

$$5 + (-11) = -6$$

$$-8 + 12 = 4$$

$$(-18) + 9 = -9$$

$$(-12) + (4) = -8$$

Three Integers:

$$\begin{aligned} (-5) + (-3) + (-8) &= -16 \\ (-6) + 4 + (-7) &= -9 \end{aligned}$$

$$\begin{aligned} -7 + 5 + 9 &= 7 \\ 9 + (-8) + 4 &= 5 \end{aligned}$$

Algebraic Subtraction of Integers

Two Integers:

$$-4 - 6 = -10$$

$$12 - 16 = -4$$

$$(-4) - (-6) = 2$$

$$5 - (8) = -3$$

Three Integers:

$$-3 - (8) - (-6) = -5$$

$$12 - (-6) + 8 = 26$$

$$-8 + (-3) - 5 = -16$$

$$9 - 6 - 7 = -4$$

Using Parenthesis:

$$-5 + (-3 + 5) = -3$$

$$3 - (-5 - 7) = 15$$

$$11 + (11 - 15) = 7$$

$$-2 - (12 - 4) = -10$$

Multiplication, Division & Combined Operations

Two Integers:

$$(-13)(12) = -156$$

$$(9)(6) = 54$$

$$-132 \div (-11) = 12$$

$$84 \div (-7) = -12$$

3 or More:

$$(-2)(-5)(7) = 70$$

$$(-4)(3)(4)(5) = -240$$

$$(3)(-3)(-1)(-1)(-2) = 18$$

$$(-1)(-1)(-1)(-1)(-1) = -1$$

Combined Operations:

$$-5 + 3(-6) = -23$$

$$12 + (-7)(-9) = 75$$

$$22 - 9(-14) = 148$$

$$-15 - 3 \bullet 18 = -69$$

Appendix C: Interface Commands

MOUSE COMMAND	KEYBOARD COMMAND	MEANING
(None)	F1	Help: Assistance and instructions available by search.
Click on Main Menu	F3	Main Menu: Advances the program to the screen where you may choose an activity button.
Click on Subject	F4	Subject Menu: Advances the program to the screen where you may choose the algebra skill you wish to work on.
Click on New	F5	New User Screen: Advances the User button program to the screen where you sign in.
(None)	F8	Sound: Turns the sound ON or OFF.
(None)	F9	Version: Provides information of this version of NOTHIN' BUT THE FACTS
Click on Examples	E	Examples: Displays methods of button solution & a complete set of examples
Click on Review	R	Review Activity: Advances the program to the Review Activity from the Main Menu.
Click on Practice	P	Practice Activity: Advance the button program to the Practice Activity from the Main Menu
Click on Drill	D	Drill Activity: Advances the button program to the Drill Activity from the Main Menu

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