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It is my hope that you find the file of use to you personally – I know that I would have liked to have found some of these files years ago – they would have saved me a lot of time !

Colin Hinson

In the village of Blunham, Bedfordshire.



TEXAS INSTRUMENTS HOME COMPUTER

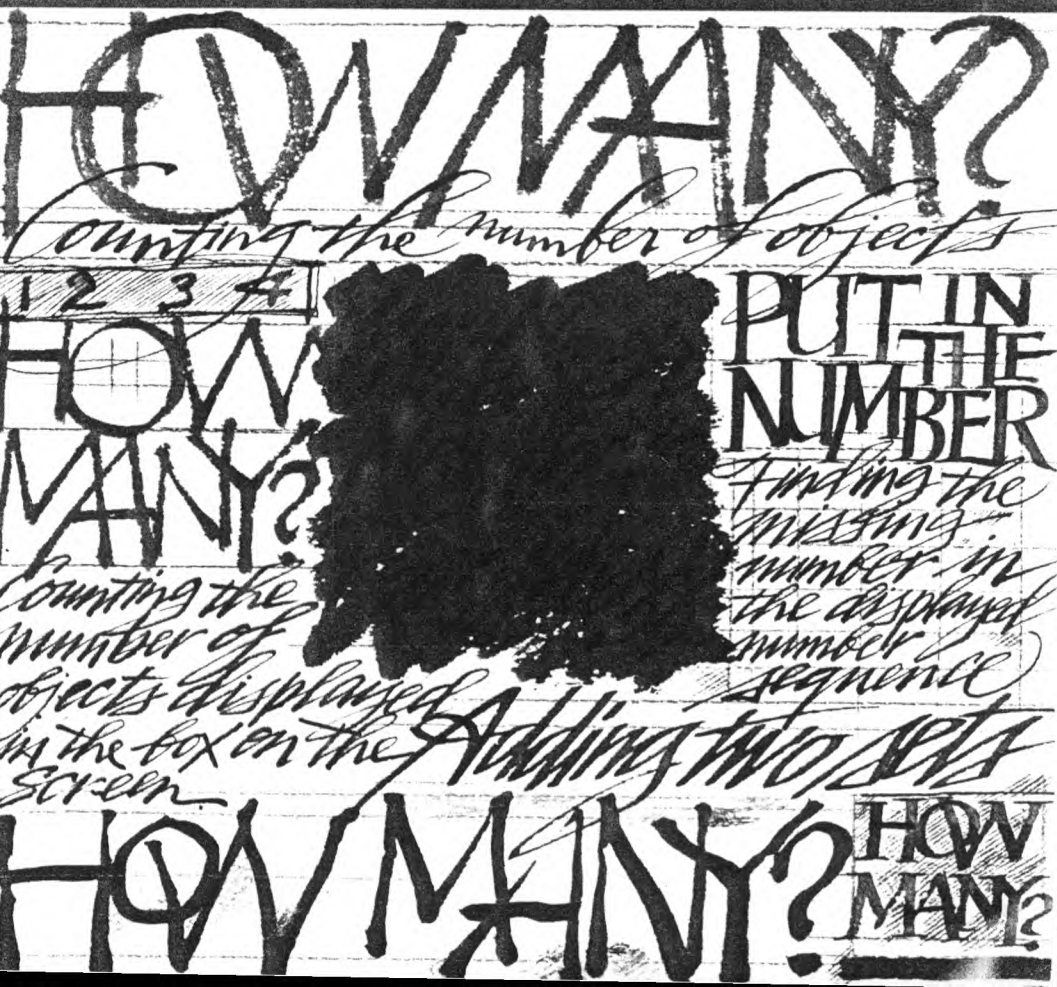
MILLIKEN MATH SEQUENCES:

NUMBER READINESS

EDUCATION

SOLID STATE CARTRIDGE

A self-paced "tutor" which presents a variety of problems to introduce children to number values and set theory. Suitable for children from kindergarten to first grade.



Quick Reference Guide

Note that the key sequences required to access special functions depend on the type of computer console you have. Important keystroke sequences are summarized here for your quick reference.

<i>TI-99/4</i>	<i>TI-99/4A</i>	
ENTER	ENTER	Proceeds to next problem or continues to solve a problem after an incorrect answer has been given in the "Study the Answer" feature. Also used to enter Beginning Level and Name
SHIFT S (-)	FCTN S (-)	Allows you to move the cursor back to correct errors on the "Levels 1-16" screen before pressing ENTER.
E	E	Tells the computer you want to quit ("exit") the work session or leave a particular level.
SHIFT Q (QUIT)	FCTN = (QUIT)	Returns to the master title screen.

Milliken Math Sequences: Number Readiness

This Solid State Cartridge is designed to be used with the Texas Instruments Home Computer. One in a series of twelve cartridges, it can help your child develop the strong math skills needed in today's and tomorrow's world. Suitable for children from kindergarten through first grade.

Programmed by: John Plaster

Book developed and written by: Staff members of Texas Instruments Creative Communications.

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Program and data base contents

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See important warranty information on back of book.

A NOTE TO PARENTS

Children need strong math skills to solve today's and tomorrow's problems. The Milliken Math Sequences, along with the TI Home Computer, can help your child meet these challenges. The series allows children to work at their own pace and on the skill level at which they need practice. Children find that learning with the computer is fun, challenging, and motivating. The computer never tires of repetition or loses patience—it's like having a private math tutor!

The Milliken Math Sequences, developed for Texas Instruments by Milliken Publishing Company, consists of twelve Solid State Cartridges. Each cartridge concentrates on a different skill area in mathematics, such as addition, subtraction, decimals, or fractions. By providing different levels of difficulty, the series is suitable for children from the kindergarten age through grade eight.

The Number Readiness cartridge is divided into 16 levels of difficulty, covering material generally taught in kindergarten through first grade. The program provides practice with number values, simple addition, and set theory (the grouping of any amount of elements). Children are also given practice with number sequences. Periodically, reviews of the material are given as reinforcement.

The Number Readiness cartridge offers several special features that increase its motivational and reinforcement value:

- Colorful, rewarding graphics and sound effects that appear in response to correct answers.
- An unthreatening, try-again approach to incorrect answers.
- A progress report posted at the bottom of the screen.
- A feature that allows your child to study the answer to the problem if he or she makes a mistake.
- Advancement to the next level if problems are answered correctly, or automatic return to a lower level if your child needs more practice.
- Report screens personalized with your child's name at the end of each level's activities.
- An "Exit" screen with a complete report on your child's score at the end of the work session.

YOUR CHILD AND THE COMPUTER

The Texas Instruments computer is a rugged, durable device designed for easy use and care. Teach your child to give the computer the same good care and respect he or she would give a television set, record player, or any piece of electronic equipment:

1. Keep snacks and beverages away from the console.
2. Don't hammer on the keyboard or place heavy objects on it.
3. Don't touch the cartridge contacts. These are recessed in the cartridge to help prevent accidental soiling and/or damage.

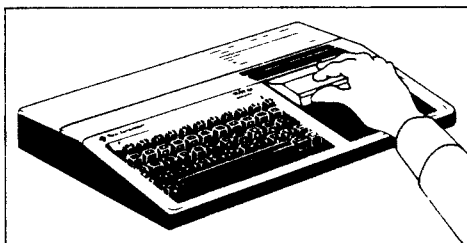
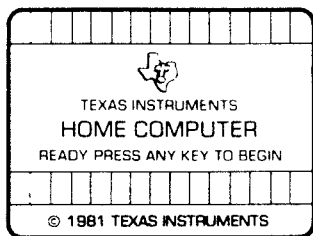
The letters and numbers on the keyboard are arranged in the same order found on standard typewriter keyboards. If your child is not familiar with a typewriter or has not used the computer before, take a few minutes to acquaint him or her with the keyboard. Point out the row of number keys at the top and the rows of letter keys below. Show your child how to insert the cartridge and how to select the activities. This brief "tour" of the computer will help reinforce the correct procedures for your child and instill confidence as he or she starts out in a new world of computers.

Today computers are involved in almost every aspect of life. Working with this cartridge can help your child become familiar with computers and their operation. Since computer-aided instruction is more common in the classroom every year, this knowledge can give your child an important advantage.

USING THE SOLID STATE CARTRIDGE

An automatic reset feature is built into the computer. When a cartridge is inserted into the console, the computer returns to the master title screen. All data or program material you have entered will be erased.

Note: Be sure the cartridge is free of static electricity before inserting it into the computer (see page 10).



1. Turn the computer ON, and wait for the master title screen to appear. Then slide the cartridge into the slot on the console.
2. Press any key to make the master selection list appear. To select the cartridge, press the key corresponding to the number beside MILLIKEN on the list.

Note: To remove the cartridge, *first* return the computer to the master title screen by pressing QUIT. *Then* remove the cartridge from the slot. If you have any problem inserting the cartridge, or if it is accidentally removed from the slot while in use, please see "In Case of Difficulty" on page 11.

A SAMPLE ACTIVITY

For easy use, directions are displayed on the screen throughout all the levels. This sample activity, however, can help to illustrate the way the program works.

Let's Begin

When the Milliken title screen appears, press any key to begin. The screen then prompts you to enter the Beginning Level. Select any level from 1 to 16 by typing the number and then pressing **ENTER**. For this example, press **3** and **ENTER**. Next, the screen asks for Name. Type your child's name (up to ten letters long) and press **ENTER**.

Note: If you make an error while typing either the Beginning Level or the Name, press the **LEFT-ARROW** key to backspace to the error. Then, retype the number or name correctly.

Now a problem is displayed on the screen, and the message "HOW MANY?" appears on the screen. Your child must determine how many objects are displayed in the box on the screen.

A progress report appears across the bottom of the screen, with the following meanings:

PL	=	Problem Level
TC	=	Total Correct
TP	=	Total Problems
AVG	=	Average

As your child works through the problems, these figures are updated to report his or her progress. TC, TP, and AVG are automatically reset to zero at the beginning of each level.

Entering Answers

Let your child answer a few problems as you observe. He or she simply presses the correct number from the top row of keys. Two-digit answers are entered from left to right.



How the Computer Responds

If the problem is answered correctly, an animated picture appears. Your child then presses **ENTER** to continue to the next problem.

If the problem is answered incorrectly, the screen tells your child that the answer is wrong and encourages him or her to try again. Your child then presses **ENTER** to continue. If your child has not answered the problem correctly on his or her second attempt, the screen border turns red and flashes. To continue, your child presses **ENTER** again, and the computer gives the answer, with a message to "STUDY THE ANSWER." When your child presses **ENTER** again, the next problem appears.

Advancing or Moving Back

If your child answers five of the previous six problems correctly, a "Good News" report is displayed. He or she then advances to the next level. If three problems in a row are answered incorrectly, a "Bad News" report appears, and your child moves back one level.

Changing Levels

You can change levels any time the question mark is flashing. To leave this level, simply press the letter **E** for "exit." An "EXIT" screen appears, which reports on your child's progress. Press **ENTER** to return to the Milliken title screen.

Let's try another level. Press any key to go to the "Levels 1-16" screen. This time, enter 11 as the Beginning Level. Then type your child's name again, and press **ENTER** to continue.

Problems at Level 11 involve finding the sum of the two sets displayed on the screen. A flashing question mark shows where the answer will go, and the directions on the screen tell your child to "ADD THE SETS." One set's elements consist of numerals, and another set is made up of shapes. The child computes the problem mentally to determine the total number of the elements in the two sets combined and then enters the correct answer.

Continue to observe as your child works through the problems and gains familiarity with the program's operations.

TEXAS INSTRUMENTS HOME COMPUTER

SKILL LEVELS

This chart can help you find the appropriate starting level for your child. By looking at the sample problems and the skill description, select a level that is not too easy, but also not too difficult, for him or her. If in doubt, start at a lower level and work up from there.

Level	Sample Problem	Skill Description
1-2	How Many <u> ?</u>	Counting the number of shapes displayed in the box on the screen. Number of shapes: 1 to 5.
3-4	How Many <u> ?</u>	Counting the number of shapes displayed in the box on the screen. Number of shapes: 0 to 7.
5-6	How Many <u> ?</u>	Counting the number of shapes displayed in the box on the screen. Number of shapes: 6 to 10.
7-8	How Many <u> ?</u>	Review of Levels 1 through 6. Counting the number of shapes in the box on the screen. Number of shapes: 0 to 10.



Level	Sample Problem	Skill Description
9-10	Add the Sets. <u> ?</u>	Adding two sets of shapes. Number of shapes in each set: 0 to 5.
11-12	Add the Sets. <u> ?</u>	Adding two sets. One set consists of numerals from 0 to 5. Another set consists of 0 to 5 shapes.
13-14	Put in the Number. <u> ?</u> , 3, 4, 5	Finding the missing number in the displayed number sequence. Missing numbers are from 0 through 10.
15-16	Put in the Number. 6, <u> ?</u> , 8	

CARING FOR THE CARTRIDGE

These cartridges are durable devices, but they should be handled with the same care you would give any other piece of electronic equipment. Keep the cartridge clean and dry, and don't touch the recessed contacts.

CAUTION:

The contents of a Solid State Cartridge can be damaged by static electricity discharges.

Static electricity build-ups are more likely to occur when the natural humidity of the air is low (during winter or in areas with dry climates). To avoid damaging the cartridge, just touch any metal object (a doorknob, a desk lamp, etc.) before handling the cartridge.

If static electricity is a problem where you live, you may want to buy a special carpet treatment that reduces static build-up. These commercial preparations are usually available from local hardware and office supply stores.



IN CASE OF DIFFICULTY

If the cartridge activities do not appear to be operating properly, return to the master title screen by pressing **QUIT**. Withdraw the cartridge, align it with the cartridge opening, and reinsert it carefully. Then press any key to make the master selection screen appear. (*Note: In some instances, it may be necessary to turn the computer off, wait several seconds, and then turn it on again.*)

If the cartridge is accidentally removed from the slot while the cartridge contents are being used, the computer may behave erratically. To restore the computer to normal operation, turn the computer console off, and wait a few seconds. Then, reinsert the cartridge, and turn the computer on again.

If you have any difficulty with your computer or cartridge, please contact the dealer from whom you purchased the unit and/or cartridge for service directions.

Additional information concerning use and service can be found in your *User's Reference Guide*.

Texas Instruments invented the integrated circuit,
the microprocessor, and the microcomputer.
Being first is our tradition.



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