

CONTENTS

	Page
MAIN MENU WINDOW	1
LEVEL WINDOWS	1
LASER BLAST	1
BUG NUMBERS	2
APPLESPIDER	2
TIMETABLE	3
ADDITION	4
LEVEL 1	4
LEVEL 2	4
LEVEL 3	4
LEVEL 4	4
SUBTRACTION	4
LEVEL 1	5
LEVEL 2	5
LEVEL 3	5
LEVEL 4	5
MULTIPLICATION	6
LEVEL 1	6
LEVEL 2	6
LEVEL 3	6
LEVEL 4	6
DIVISION	7
LEVEL 1	7
LEVEL 2	7
LEVEL 3	7
LEVEL 4	7
ALGEBRA	7
REGISTER	8

MOM'S MATH Version 4.0
The Manual

The minimum hardware requirements for running MOM'S MATH are 256K RAM and color graphics adapter (CGA). The minimum software requirement is DOS version 2.0 or higher.

MAIN MENU WINDOW

This window lists all the main options that you may choose from such as Laser Blast, Bug Numbers, Applespider, Addition, Subtraction, Multiplication, Division, and Algebra. There are two ways to select an option from Main Menu. You may use the up or down arrow keys to highlight the desired option then press the ENTER key to accept the option. You may also press the key corresponding to the first letter of the desired option until the option is highlighted then press the ENTER key. Accept END or press the ESC key to stop the program.

Use the right and left arrow keys to select whether or not you want sound. All options produce sound to indicate a wrong answer (beep). For each 100 point some option reward you with a randomly chosen tune if sound is on.

LEVEL WINDOWS

Some options have level windows. These windows are used to select learning levels. Choose from this menu using the same techniques as in Main Menu. Accept END, or press the ESC key to return to Main Menu.

LASER BLAST

This is an exciting game that entertains and teaches quantity. First, a number of blocks are shown. Then, colored numbers begin to float across the screen. The object of the game is to shoot the correct number with the laser. The correct number is the one that equals the number of blocks. To shoot, simply push the SPACE BAR. To return to Main Menu press ESC.

To get numbers 0 through 4, start the game by pressing the number key "1". To get numbers 5 through 9, press "2" to start. Obviously, most pre-schoolers should start with the numbers 0 through 4.

Points are given for each hit. The faster you play, the more points given. The speed can be increased by using the > key and decreased using the < key.

If you want to change the background color just press c. Be careful not to choose a background color that matches one of the floating numbers. If this happens you will not be able to see that particular number.

BUG NUMBERS

This option teaches the concept of multi-digit numbers. You are shown three large boxes. The box on the right will have 0 to 9 large individual bugs. The center box will have smaller bugs grouped in clusters of 10 each. The box on the left will have very small bugs in groups of 100 bugs each. Your job is to find how many bugs are shown on the screen.

You must first count the number of large bugs in the far right box. Type this number and press ENTER. This gives you the least significant digit. Next, count the number of groups that contain 10 bugs and enter this number. This gives you the next most significant digit. Finally, count the number of groups that contain 100 bugs and enter this number. This gives you the most significant digit and you're done. Ten points are given for completion.

APPLESPIDER

This is a very exciting and intense game that drills you in basic addition, subtraction, multiplication, or division. From the Applespider opening screen press A to be drilled in addition, S for subtraction, M for multiplication, or D to be drilled in division.

Next, you must choose your playing speed. Press 0 to get the slow speed for beginners or 1 through 4 for faster speeds. More points are given for playing faster.

The applespider wants to eat your apple. You must prevent this by using the arrow keys to move the apple out of the spider's way. At the beginning you are given 10 free moves. To get more moves you must solve the equation at the bottom of the screen. For every correct answer you get five more moves and points are added to your score. As your score increases, the spider gets faster.

Your Applespider score will get added to your total Math score only if you win the game. You win when you have correctly answered 20 math problems. When this happens another apple will fall on the spider and squash him.

As always, press ESC to stop.

TIMETABLE

After selecting this option you are asked to enter a number from 1 to 7. This will be the number used in the multiplication tables. Press a number then press ENTER. A worm will move that many apples onto the screen in one row. Then, you'll have to multiply the number you chose by 1 to continue. Let's assume you chose the number 5. After you give the answer 5×1 equals 5 the worm will move another row of 5 apples onto the screen. You must now give the answer to 5×2 . This continues until 5 rows are done. You can always find the answer by adding the total number of apples.

When you're done just press the ESC key. You'll then be shown how many points you accumulated. More difficult multiplication tables give higher scores.

ADDITION

This option has four levels of difficulty. In each level the numbers are chosen at random.

ADD LEVEL 1

In this beginners level, stars are shown beside each number. The number of stars equals the number. For example, suppose you are asked to add the numbers 2 and 3. Beside 2 there will be two stars and beside 3 there will be three stars. To find the answer just count the number of stars, type the answer and press the ENTER key. After you've entered the correct answer you must press a key to continue.

ADD LEVEL 2

This level is exactly like Level 1 except the numbers are larger and the stars are not shown.

ADD LEVEL 3

This level illustrates how to add multiple digit numbers by stepping you through the process. Again, all numbers are chosen at random. Active elements of the problem are highlighted by flashing the digits. Individual questions in the form of simple equations are shown at the bottom of the interactive window. A flashing cursor at the end of this equation indicates that an input is expected. If you enter the correct value it will be placed in its proper spot. The computer will beep if the answer is incorrect. When you've finished with the problem, you must press a key to continue.

ADD LEVEL 4

This level is exactly like Level 3 except numbers with decimals are used.

In each of these levels a complete correct answer is rewarded by the addition of 10 points to your score. If sound is on you'll also get a tune for every 100 points. You can press ESC to quit and return to Level Menu when you're done.

SUBTRACTION

This option has four levels of difficulty. In each level the numbers are chosen at random.

SUB LEVEL 1

In this beginners level, stars are shown beside each number. The number of stars equals the number. If you are asked to, for example, subtract 2 from 4 there will be two stars beside the number 2 and four stars beside the number 4. However, two of the four stars beside the number four will be blinking to indicate the two that will be taken away. Also, the two stars beside the number 2 will be blinking. To find the answer just count the number of stars that are not blinking. After you've entered the correct answer you must press a key to continue.

SUB LEVEL 2

This level is exactly like Level 1 except the numbers are larger and the stars are not shown.

SUB LEVEL 3

This level illustrates how to subtract multiple digit numbers by stepping you through the process. Again, all numbers are chosen at random. Active elements of the problem are highlighted by flashing the digits. Individual questions in the form of simple equations are shown at the bottom of the interactive window. A flashing cursor at the end of this equation indicates that an input is expected. If you enter the correct value it will be placed in its proper spot. The computer will beep if the answer is incorrect. When you've finished with the problem, you must press a key to continue.

SUB LEVEL 4

This level is exactly like Level 3 except numbers with decimals are used.

In each of these levels a complete correct answer is rewarded by the addition of 10 points to your score. If sound is on you'll also get a tune for every 100 points. You can press ESC to quit and return to Level Menu when you're done.

MULTIPLICATION

This option also has four levels of difficulty.

MUL LEVEL 1

This level is similar to Add & Sub Level 1 because you must count stars that do not blink to find the correct answer. The difference is that the stars are grouped differently and there is only one line with stars. For example, suppose you are asked to find the product of 4 and 2. At the bottom, where the answer belongs, you will find two groups with four stars each. In other words, the computer has taken the four stars and placed them in the answer line twice. There is a total of 8 stars and they have been placed on the line where the number 8 belongs.

MUL LEVEL 2

This level is like Level 1 but larger numbers are used and no stars are displayed.

MUL LEVEL 3

This level leads you through long multiplication with multiple digit numbers. As in Add & Sub levels 3 & 4, active elements of the problem are highlighted by flashing the numbers. The instructions and questions to be answered are displayed at the bottom of the interactive window. The flashing cursor at the end of this question or equation is an indication that the computer is waiting for an input.

MUL LEVEL 4

Level 4 is identical to Level 3 except decimals are used.

In each of these levels a complete correct answer is rewarded by the addition of 10 points to your score. You can press ESC to quit and return to Level Menu when you're done or press any other key to continue.

DIVISION

This option also has four levels of difficulty.

DIV LEVEL 1

This level is similar to Add & Sub Level 1 because you must count stars that do not blink to find the correct answer. The difference is that the stars are grouped differently and there is only one line with stars. If you are asked to, for example, divide 12 by 3 then beside the 12 will be placed three groups of stars with 4 stars in each group. Only one group will not be blinking. So, if you count the stars that do not blink, you'll find the correct answer to be 4.

DIV LEVEL 2

This level is like Level 1 but larger numbers are used and no stars are displayed.

DIV LEVEL 3

This level leads you through long division with multiple digit numbers. As in Add & Sub levels 3 & 4, active elements of the problem are highlighted by flashing the numbers. The instructions and questions to be answered are displayed at the bottom of the interactive window. The flashing cursor at the end of this question or equation is an indication that the computer is waiting for an input.

DIV LEVEL 4

Level 4 is identical to Level 3 except decimals are used.

In each of these levels a complete correct answer is rewarded by the addition of 10 points to your score. You can press ESC to quit and return to Level Menu when you're done or press any other key to continue.

ALGEBRA

This option also has four levels of difficulty. All four levels are basic introductory algebra but the

difficulty level does increase slightly with each level. In each level you must solve for the unknown value of Y. Just follow the instructions and answer the questions, and the computer will lead you through the solution. When you see the cursor flashing, the computer is waiting for an input.

In all the Math options, the active parts of the equation are highlighted by flashing the numbers. Also, the final correct answer is rewarded by the addition of 10 points to your score. Press ESC to quit and return to Level Menu when you're done or press any other key to continue.

REGISTER

If you are not a registered owner of MOM'S MATH you can use this option to print a registration letter.

FINAL COMMENTS

I HAVE WORKED VERY HARD TO GET ALL THE BUGS OUT OF THIS PROGRAM. HOWEVER, I CAN NOT GUARANTEE THAT NONE EXISTS. WHEN YOU USE THIS SOFTWARE YOU MUST DO IT AT YOUR OWN RISK. I ACCEPT NO RESPONSIBILITY FOR DAMAGE THAT MAY OCCUR AS A RESULT OF ITS USE.

If you have questions or comments you may write to me at my permanent address:

Dr. Andy Motes
PO BOX 575
Siloam Springs, AR 72761

Registration Letter

TO: Dr. Andrew Motes
Motes Educational Software
PO BOX 575
Siloam Springs, AR 72761

FROM: _____

Please register my copy of MOM'S MATH version 4.0. Also, send me my free evaluation copy of your popular children's education program, SCHOOL-MOM, and a coupon worth \$10 off its purchase price. I've enclosed the \$10.00 registration fee for MOM'S MATH.

Arkansas residents please add 7.5% (or 55 cents) for tax. For those registering from outside the US, please use US funds with postal money orders. Thank you.

I use 5.25 inch _____ / 3.5 inch _____ disks. (Please check one)

