M*A*T*H CIRCUS

User's Guide

Copyright Steve Luckett, Bruce Mitchell and David Smith, 1993, 1996.

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M*A*T*H CIRCUS is distributed in the United States of America by Power Industries, Inc., 37 Walnut Street, Wellesley Hills, MA 02181. User support is available by calling 800 395-5009.

M*A*T*H CIRCUS is a collection of puzzles based on the theme of a circus. The puzzles are "mathematical" in that they require reasoning, but they are better described as problem-solving activities, designed to stimulate the user and to provoke clear thinking in an enjoyable and challenging manner. There are twelve puzzles, each with five levels of difficulty. Together, these address a wide range of ages and abilities.

M*A*T*H CIRCUS provides challenging and thought-provoking entertainment for all ages. The lowest levels of many of the puzzles are suitable for the youngest members of the family — even those at pre-reading ages. Most puzzles have very little text. The youngest users might need help from an older person to read any text and explain the concept of the puzzle. However, once they grasp the intent of each puzzle, they will be able to meet the challenge. The middle levels generally require more persistence and the development of a strategy, while everyone — including adults — should find the top levels of some of the puzzles quite tricky.

Older children and parents should avoid giving too much help to younger users. Help them to read any text and to understand what each puzzle is about, but let them work out the solutions for themselves. Remember that it might take younger children some time to work out what appears obvious to an older person.

There is no one correct solution to each puzzle. It is up to the user to explore and to work out a suitable approach. If you are not sure what to do, guess. Solutions are found through trial and error — even if it requires more error than trial!

GETTING STARTED

INSTALLATION

DOS (If You Are Not Running Windows)

- 1. Place the M*A*T*H CIRCUS disk in the disk drive.
- 2. At the DOS prompt, type **A:\INSTALL** (or replace **A** with the letter that signifies the disk drive in which you placed the M*A*T*H CIRCUS disk) and press ENTER.
- 3. Follow the instructions that appear on the screen and M*A*T*H CIRCUS will be installed successfully.

Windows

- 1. Place the M*A*T*H CIRCUS disk in the disk drive.
- 2. Start Windows if it is not already running.
- 3. Select Run from the File menu.
- 4. Type **A:\INSTALL** in the Command Line box (or replace **A** with the letter that signifies the disk drive in which you placed the M*A*T*H CIRCUS disk) and press ENTER.
- 5. Follow the instructions that appear on the screen and M*A*T*H CIRCUS will be installed successfully.

Creating a Windows Icon for M*A*T*H CIRCUS

The software installation automatically creates the directory C:\CIRCUS in which to store M*A*T*H CIRCUS — unless you specify otherwise. If you choose another directory or drive, replace C:\CIRCUS in these instructions with the appropriate information.

- 1. With the Program Manager window active, click on the group in which you want the M*A*T*H CIRCUS icon to appear. For example, you might choose the Games group.
- 2. Select New from the File menu, click on Program Item, and click on OK.
- 3. Fill in the dialog box that appears with the following information (pressing TAB rather than ENTER at the end of each line):

Description: Math Circus

Command Line: Circus

Working Directory: C:\CIRCUS

- 4. Now click on the button labeled Change Icon. You will see a message saying that no icons are available. Ignore this and click on OK.
- 5. A Change Icon dialog box will appear. In the box labeled File Name, type C:\CIRCUS\CIRCUS.ICO.
- 6. Click on OK. An icon of a circus tent will appear.
- 7. Click on OK to leave the Change Icon dialog box, and again on OK to return to the Program Manager window.
- 8. Double-click on the program group in which M*A*T*H CIRCUS is installed and you should find the circus icon.
- 9. Double-click on this icon to launch M*A*T*H CIRCUS.

REGISTRATION

When you start M*A*T*H CIRCUS for the first time, a screen will appear asking you to register the software by typing in your name. You do this only once — the registration screen will not appear again.

LAUNCHING M*A*T*H CIRCUS

HOW TO START THE SOFTWARE

DOS Without Windows

To run M*A*T*H CIRCUS from a floppy disk:

- 1. At the DOS prompt, type **A:** and press ENTER (or replace **A** with the letter that signifies the disk drive in which you placed the M*A*T*H CIRCUS disk).
- 2. At the A:\> prompt, type **CIRCUS** and press ENTER.
- 3. M*A*T*H CIRCUS will start.

To run M*A*T*H CIRCUS from a hard drive:

- 1. Type **C:** and ENTER at the DOS prompt, then **CD CIRCUS** and ENTER to change to the directory in which M*A*T*H CIRCUS was installed.
- 2. Type **CIRCUS** at the C:\CIRCUS> prompt and press ENTER.

3. M*A*T*H CIRCUS will start.

If M*A*T*H CIRCUS was installed in a different directory, replace the directory name **CIRCUS** in these instructions with the name of the directory in which M*A*T*H CIRCUS was installed.

With Windows

To launch the software from Windows, double-click on the M*A*T*H CIRCUS icon. Use the instructions above to create a Windows icon for M*A*T*H CIRCUS.

HOW TO DRIVE THE SOFTWARE

Every screen has a number of choices available. Each is shown in a rectangular box that contains some text or an icon. The user chooses the required one, using a mouse or the keyboard. If you experience difficulty, see the section below on Troubleshooting to solve any problems.

Using a Mouse

This is the normal navigation method. Move the mouse until the pointer highlights the required choice, then click the left-hand mouse button. If your mouse has two or three buttons, you can click the right-hand mouse button to step through the choices instead of moving the mouse.

Using the DOS Keyboard

You can use the SPACE BAR to step through the available choices, pressing ENTER when the required choice is highlighted. Note that the pointer will appear even if you are not using a mouse.

Driving Each Puzzle

At the top of each puzzle screen is a bar containing various icons. The gauge shows the level of difficulty. The five dots indicate the five levels of difficulty, and also indicate whether or not each level has been solved — a green dot if it has, a red dot if success is elusive. Click on the arrows on each side of the gauge to select the level you want to attempt. Click on the check-mark icon to start the puzzle, and click on the circus-tent icon to

return to the puzzle menu.

Quitting

You should quit M*A*T*H CIRCUS by returning to the main menu and selecting Quit. However, if for some reason you wish to quit immediately, this can be achieved by typing CTRL-C or CTRL-Q.

THE MAIN MENU

INSTRUCTIONS

Click on "Instructions" to receive a brief description of how to operate M*A*T*H CIRCUS using a mouse or the keyboard. The icons that appear at the top of each puzzle are also explained.

START M*A*T*H CIRCUS

Click on "Start Math Circus" to try any of the puzzles. Another menu will appear with the following four items.

Start a New Circus

This option allows your progress to be saved when you want to quit M*A*T*H CIRCUS. It enables you to continue from the same point the next time you play, providing a record of the level you have reached in each puzzle. Up to fourteen circuses can be saved — enough for most families!

When you start a new circus, you will be asked to type in your name. Next, choose the puzzle you want to attempt to solve. There is also an option allowing you to check your progress, so you can see which levels you have solved at any time. Each time you successfully solve a puzzle, your achievement is recorded.

Continue a Saved Circus

Choose this to resume a saved circus. The names of all saved but incomplete circuses will be displayed. Click on the one you want or select it and press

ENTER.

Just Practice

This option allows you to attempt any of the puzzles without having to save your progress. Many of the puzzles have a random renewal so that each level will be slightly different each time it is selected.

Do not select this option if you intend to quit M*A*T*H CIRCUS to work out a puzzle on paper. Invariably, when you restart the program and go to put your customized solution into practice, the puzzle will be different. It's best to start a new circus in the first place, and then return to that circus when you want to apply your solution.

Cancel

Clicking on this option returns you to the main menu.

SOUND MENU

There are two kinds of sound used in M*A*T*H CIRCUS. The first is the introductory music that plays when the program is launched. The second comprises the sound effects that accompany each puzzle. The Sound Menu allows each type of sound to be turned on or off.

There is also an option in the Sound Menu to use Sound Blaster. Turning on Sound Blaster will improve the sound and music quality of M*A*T*H CIRCUS if you have a Sound Blaster card. If you turn on the option and the computer does not have a card or the necessary driver, an error message will appear. If you do have a Sound Blaster card and it doesn't work when the option is turned on, follow the advice in the Troubleshooting section below.

DELETE SAVED CIRCUSES

Use this option to delete any one or all saved circuses. The program allows for fourteen saved circuses. Once the limit is reached, you will have to delete some if you want to save others.

Select this option when you want to leave M*A*T*H CIRCUS.

TROUBLESHOOTING

MOUSE DOES NOT WORK

Remember that you do not need a mouse to operate M*A*T*H CIRCUS. If you find that your mouse works properly in Windows but does not work when you launch M*A*T*H CIRCUS, then you do not have a suitable mouse driver installed on your computer. Even though your mouse works successfully in Windows, you may not have a mouse driver suitable for operating in a DOS environment. Windows uses its own mouse driver, but a separate driver is needed to use a mouse with non-Windows programs such as M*A*T*H CIRCUS. This is the case even if M*A*T*H CIRCUS is launched from within Windows.

When your computer was set up, a mouse driver would have been installed and your AUTOEXEC.BAT or CONFIG.SYS file should contain an entry that starts up the mouse driver when your computer is turned on. Your mouse should have been supplied with a disk that contains all its possible drivers — and instructions for their installation. Use it to install the driver that runs your mouse for non-Windows programs.

If you do not have the disk, contact your computer dealer and ask for a mouse driver that allows the mouse to operate outside Windows.

SOUND BLASTER DOES NOT WORK

M*A*T*H CIRCUS supports Sound Blaster, provided that suitable hardware and software are correctly installed on your computer. M*A*T*H CIRCUS has been tested on 386, 486, and Pentium computers — with genuine Sound Blaster cards and current drivers — and started from both

DOS and Windows. However, because of the variety of sound cards and software, their numerous possible settings, and the varying speeds of different computers, you might experience problems — particularly running M*A*T*H CIRCUS from within Windows.

If you have a Sound Blaster card but receive the message that it is not available, try launching M*A*T*H CIRCUS from DOS. To do this, you must quit Windows altogether. It is not enough to double-click on the MS-DOS icon in Windows.

If Sound Blaster operates by launching M*A*T*H CIRCUS from DOS, then there is a clash between Windows and Sound Blaster. You need to check that your drivers are the most current versions. If your sound card is only a "compatible" and not a genuine Sound Blaster card, there may be no option but to switch off Sound Blaster in the M*A*T*H CIRCUS Sound Menu.

Other errors that occur when running M*A*T*H CIRCUS through Windows can also be caused by clashes with the sound system. The solution is to either launch M*A*T*H CIRCUS from DOS or switch off Sound Blaster in the Sound Menu.

OPENING MUSIC PLAYS SLOWLY OR ODDLY

On some slower computers, particularly if they are running Windows, the opening music might play irregularly or slowly — or completely freeze. The animation on the title screen might also be jerky or run very slowly. There might also be odd clicks from the speakers. To relieve any of these problems, you can turn off the opening music or Sound Blaster in the M*A*T*H CIRCUS Sound Menu.

CAN'T REACH THE SOUND MENU

A clash involving the program's sound system might be so bad that you can't

launch M*A*T*H CIRCUS to turn off Sound Blaster! If this occurs, change to the M*A*T*H CIRCUS directory and type **SOUNDOFF** and ENTER at the C:\CIRCUS> prompt.

Now launch M*A*T*H CIRCUS again. There will be no sound. You can go to the Sound Menu and turn on sound effects and music again, but you should leave Sound Blaster off.

SOLUTIONS

Ideally, no one should need these. The whole point is to try to find the solutions for yourself! If you become really stuck, however, you can obtain a copy of the puzzle solutions by calling Power Industries at 800 395-5009.