## Magic Squares Help Index <br> MAGICSQU.HLP VERSION 1.0.3

This Index lists all Help topics available for Magic Squares. Use the scroll bar to see entries not currently visible in the Help window.

## Games

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Changing the Font

## Requirements

(1) 386 or 486 highly recommended.
(2) Windows 3.1 operating in standard or enhanced mode.
(3) Windows 3.1 supported color graphics card.
(4) Mouse or other pointing device.

Magic Squares may run properly, but has not been tested, under other configurations.

## Description of Sliders

Sliders is an adaptation of a popular puzzle which was probably designed to amuse young children during automobile rides on family vacations. The classic puzzle is a randomly ordered 4 by 4 matrix of moveable tiles numbered 1 through 15. One cell of the matrix is always vacant and is the space into which the numbered tiles are moved.

## How to play

The object of sliders is to arrange the tiles into some numerical sequence. You do this by moving the mouse cursor over a numbered tile which is adjacent to the vacant cell. Clicking the LEFT mouse button on that tile will cause it to swap places with the vacant cell. You may not move the vacant cell ever, and you may only move the numbered tiles in the vertical or horizontal direction.

Sliders is different from the classic puzzle in several ways. First, the tiles are automatically scrambled at the beginning of each new game. Second, there are three matrix sizes available: 3 by 3,4 by 4 , and 5 by 5 . Third, the completed tile sequence is always in ascending order with the vacant cell in the last position of the matrix. Finally, you can't cheat by popping the squares in and out of the puzzle!

## Sliders Solutions

Solution to 3 by 3 Puzzle
Solution to 4 by 4 Puzzle
Solution to 5 by 5 Puzzle

Sliders 3 by 3 Solved

|  |  |  |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 |  |

Sliders 4 by 4 Solved

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 |  |

Sliders 5 by 5 Solved

| Slalp |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |  |

## Magic Numbers Description

Magic Numbers is a puzzle whose strategy is based on an ancient Chinese combinatorial curiosity called the magic square. The classic magic square is a 3 by 3 matrix that contains tiles numbered from 1 to 9 . The sum of the tile numbers must equal 15 for each column, row, and diagonal of the matrix.

## Puzzle Layout

The puzzle is grouped into three sections.
Section 1 is a group of tiles numbered from 1 to 9 . This group is situated across the top of the main window. The tile numbers are blue. When a tile from this group is dropped into place in the large matrix, a vacant area appears in it's place indicating that the tile has been used.

Section 2 is a group of 9 large areas arranged in a 3 by 3 matrix. Initially, an area in this section is vacant but changes to a numbered tile when a Section 1 tile is dropped into it.

Section 3 is a group of 8 areas that automatically display the sum of the rows, columns, and diagonals. Initially, all areas display 0. When a Section 1 tile is dropped into a Section 2 area, the corresponding row, column, and diagonal sums are calculated and displayed.

## How to play

The object of the game is to arrange the tiles so that the sum of the numbered tiles in each column, row, and diagonal is 15 .

1. Pick a number tile from the top row of tiles by clicking the LEFT mouse button. Notice that the cursor changes to the number you have selected. The cursor will reflect your choice until you release the tile, pick another tile, or move the mouse outside of the main window.
2. Move the mouse cursor over the vacant square where you want the tile to go.
3. Drop the tile by clicking the LEFT mouse button.

Repeat steps 1 through 3 until all nine tiles are in place. Make a mistake? You can put a tile back (or unuse a tile) by clicking the RIGHT mouse button on the large tile.

## Things to remember

You may not use a numbered tile more than once.
You may not put a numbered tile into an occupied space.
You may not "unuse" an empty space.
If you really think about the solution before you start, it is possible to solve the Magic Numbers 15 puzzle in 9 moves. You may never find a solution if you just move tiles randomly.

## Magic Numbers Solution

Solution to Magic Numbers 15 Puzzle

## Magic Numbers 15 Solved



One of 8 Possible Solutions

There are 8 unique triplets whose sum equals 15 .
$1+5+9=15$
$1+6+8=15$
$2+4+9=15$
$2+5+8=15$
$2+6+7=15$
$3+4+8=15$
$3+5+7=15$
$4+5+6=15$

## COUNTING MOVES

The moves you take to solve a puzzle are always counted. The number of moves is reset to 0 at the beginning of each new puzzle.

If you want to view the number of moves you take to solve a puzzle, select Game from the main menu then click the mouse on the Count Moves menu item. A check mark will appear at the left of the menu item and a small window called Moves will appear at the upper right corner of the Magic Squares window. If you no longer wish to keep track of the score, click on Count Moves again. The Moves window will disappear and the menu item will be unchecked.

## CHANGING THE FONT

If you don't like the font used in the large squares, choose Game from the main menu then click the mouse on the Font menu item. A font dialog box will appear and will allow you to change to most any font that is available on your system. Not all possible font sizes will be displayed because Magic Squares limits them between 20 and 28 points. Fonts that do not fit completely within a large square will be clipped.

Any font changes you have made will be retained in MAGICSQU.INI when you exit the game. Your font preference will be restored the next time the program is run.

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## Font

This menu selection invokes a font dialog box that allows font changes

## Game

The main menu for Magic Squares.

## Count Moves

Clicking on this menu item enables or disables the Moves window.

## Moves

This is a window that keeps track of the moves you have taken to solve a puzzle.

## Left

Left is a relative position. If the mouse buttons have been swapped then left is really right.

## Right

Right is a relative position. If the mouse buttons have been swapped then right is really left.

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