





Line designs are a popular project in Middle Grade Mathematics classes. Students begin by drawing lines on paper and progress to colored pencils and colored string. It takes hours of work to fill in a complicated design with string. Often, a student finds that the colors selected do not go well together. However, the student is reluctant to start over again due to the amount of work involved.

Line Designer was created to help the students with planning. They can view the results of their color selections immediately on the background of their choice. They can quickly see the results of using a different number of lines for each angle. When they create a satisfactory design, they can print it out, tape it down, and use the design for punching the holes or placing the brads for the string. (Designs are often done on wood with brads as well as railroad or tag board with holes.)

Line Designer helps improve students computer skills. They learn the use of the left and right mouse buttons, menus, and printing. Targets for the mouse are small enough to help improve dexterity while the program is fast enough to give immediate results.

## Legal Information

### Distribution

Unmodified copies of the Line Designer program and associated files may be made for your own use, to give without charge to others, or to distribute within a user group. User groups or other organizations may charge a fee up to \$7.50 (for duplication costs) to distribute Line Designer. The files below must be included in any distribution package:

- Comdlg32.oc\_
- ctl3d32.dl\_
- Line Designer.Ex\_
- Line Designer.lc\_
- Lines.cn\_
- Lines.hl\_
- mfc40.dl\_
- msvcrt20.dl
- msvcrt40.dl
- olepro32.dl
- setup.exe
- setup132.ex\_
- spin32.oc
- st4unst.ex
- stkit432.dl
- vb40032.dl\_
- ven2232.ol\_

Line Designer is supported by the users that find it productive. If you have benefited in some way from Line Designer or make regular use of it, please license your copy for \$10.00. Licensed users will be given a registration code to disable the startup screen. and will receive published announcements of future releases of Line Designer. For an additional \$10.00 (US), you will be mailed an installation disk.

### Phone Support is NOT provided!

The license fee is not an optional matter if Line Designer is used in a commercial environment, and must be paid for each copy of Line Designer maintained.

### Disclaimer of Warranties and Limitation of Liabilities

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By using Line Designer, you agree to the above limitations.



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## About the Author

I am a Teacher at Bridge Street Elementary School In the Los Angeles Unified School District. I teach 4th and 5th grade. In the 1995-1996 School Year, I am teaming with two other teachers. I teach Mathematics, Reading, and Music.

I wrote Line Designer in 1994. I taught a 4 week remedial class. One of our Math/Art projects was line designs. (These are great for stimulating interest in reticent children) Many of the students had difficulty visualizing their string designs. They also took a great deal of time planning the location of their lines. Some had trouble locating the holes for placing the stings. Line Designer helped by providing them with a template for their designs. First, they planned the design. Then they printed it. These designs could then be affixed to the tagboard and the holes punched.

Outside of teaching and programming, I climb Mountains. I am Past Chair of the Hundred Peaks Section of The Angeles Chapter of the Sierra Club. We have 274 Mountains on our list. I have climbed them all 3 or more times! I have also led trips up them all!

I also collect Science Fiction. I have over 3000 books. They are, of course, catalogued on my computer. In addition, I have 110 Songbooks. I play the recorder and guitar and collect Folk Songs, 13,000+. (Also catalogued)

## Register Line Designer

I have found Line Designer useful and wish to continue to use it.

\_\_\_\_I am registering for \$10.00. I will receive a <u>Registration Code</u> in the mail and notices of Future Upgrades.

\_\_\_\_I am enclosing \$20.00. I will receive an installation disk in the mail. I will also be Registered and receive the Registration Code and notices of Future Upgrades. Phone Support is NOT provided!

(Make Checks payable to David F Eisenberg.)

Name:

Title:

Company:

Address:

City, State

Zip Code

Country:

[If you do not use the USA postage conventions, Please write your full address below to insure that mail reaches you correctly]

eMail address

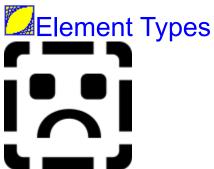
Where did you obtain this product from?

### Please send to:

David F Eisenberg 510 North Maryland Ave. #307 Glendale, CA 91206

Phone Support is NOT provided! Use Snail Mail or the EMail addresses below

Compuserve: 71662, 47 Internet: DavidFE@ix.netcom.com You may register Line Designer on Compuserve. The Registration ID is: 8675



This menu pops up when you select Element on the menu bar or press the right mouse button over the <u>Element Design Area</u>.

Unless noted otherwise, Elements may be tiled and stretched.

Click on each item for a description.

# Displaying the Selection

Press the Display Pattern Button or choose Display from the File Menu.

The screen will be blanked and painted in the currently selected <u>Background Color</u>. You will see the words Please Wait on the screen and the mouse pointer will turn into an hourglass shape.

The element will be drawn on the blank screen at each place selected on the <u>Pattern</u>. The <u>Color</u> and <u>Line</u> <u>Count</u> at each corner is replicated.

If the Stretch to Fit box is checked, the pattern will be stretched to fit the entire screen. Otherwise, the height and width will be equal and the pattern will be centered on the screen.

To clear the display, press any key or click your mouse button.

# Printing the Selection

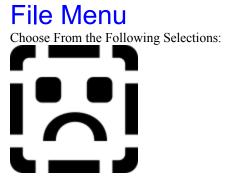
Choose Print from the File Menu.

The mouse pointer will turn into an hourglass shape.

The element will be printed at each place selected on the <u>Pattern</u>. The <u>Color</u> at each corner will be printed if Color Print is checked. The <u>Line Count</u> at each corner is replicated.

If the Stretch to Fit box is checked, the pattern will be stretched to fit the entire screen. Otherwise, the height and width will be equal and the pattern will be centered on the screen.

If Color Print is checked, the <u>background color</u> will be printed by the printer. (Note: it is much cheaper to use a background color of white and print on colored paper!)





**Element Menu** Choose the <u>Type of Element</u> you will be using.

### Element Design Area

This is the area where you create the basic element of your Line Design. This Element is then <u>tiled</u> according to the <u>patterny</u>ou have chosen. You may <u>print</u> or <u>display</u> the resulting pattern.

**Left Mouse Button:** Press over a circle with a number in it to select a corner to fill. The corner is filled with the current <u>Color</u> and <u>Line Count</u>.

Right Mouse Button: Press anywhere over this area to pop up a menu of <u>Element Types</u>.

### **Clear Button**

This button clears the <u>Element Design Area</u>. The current <u>Background Color</u> and <u>Type of Element</u> remain the same.

**Background Color** This is the color of the blank screen. If you <u>print in color</u>, this color will be printed unless it is white.

### Line Count

The number of lines to be drawn for each corner.

The previously drawn corners will not be affected unless you redraw them. Areas where lines have previously drawn will show the old lines but only the new lines will be <u>Displayed</u>or <u>Printed</u>.

**Left Mouse Button:** Press over the up or down arrow to change the line count. **Right Mouse Button:** Press anywhere over the control to pop up a menu of common Line Count values.

The line count may also be changed using the Lines Menu .

### Lines Menu

This is a list of common values for the Line Count .

### Exit

Exits the program.

### Title Bar

The name of the current <u>Element Type</u> is displayed here.

### Stretch to Fit

If Stretch to fit is selected, the pattern will be distorted to fit the entire screen and printed page. Otherwise, the pattern is displayed without stretching. **Note:** Stretch to Fit is not available for Hexagons and Pentagons.

### **Pattern Picker**

There is an "X" at each location where the element will be displayed or printed. **Note:** Hexagons have staggered rows. Pentagons may not be <u>tiled</u> so this option is not available.

### **Rows and Columns**

The number of rows and columns for <u>tiling</u> the element. An X will be displayed at each location where an element may be displayed.

**Left Mouse Button:** Press over the up or down arrow to change the values. **Right Mouse Button:** Press anywhere over the controls to pop up a menu of values.

**Note:** Hexagons have staggered rows. Pentagons may not be tiled so this option is not available.

Minimize Button Press to minimize the screen. The Line Designer Icon will be displayed.

Help Menu Press to call up help or get information about Line Designer. Select "What Is?" to get What Is Help.

### **End Button**

Press to end Line Designer.

**Control Box** This calls up the System Menu. You may Minimize, Move, or Close Line Designer.

### **Color Picker**

This area is used to select the colors used in Line Designer. The Default colors are the 16 VGA Colors.

You may use <u>Custom Colors</u> by clicking on the Current Color box.

Left Mouse Button: Press over any color. Subsequent lines will be drawn in this color. Previous colors are saved unless you reselect the corner.

Right Mouse Button: Selects the <u>Background Color</u>. The display is cleared.

**5 Star, Full Line** 5 pointed Star. Lines are drawn from Corner to Corner. This Element may not be <u>tiled</u> or <u>stretched</u>.

**5 Star, Half Line** 5 pointed Star. Lines are drawn to the midpoint of each line. This Element may not be <u>tiled</u> or <u>stretched</u>.

**6 Star, Full Line** 6 pointed Star. Lines are drawn from Corner to Corner. This Element may not be <u>stretched</u>.

**6 Star, Half Line** 6 pointed Star. Lines are drawn to the midpoint of each line. This Element may not be <u>stretched</u>.

### Circle

Fills a circle with equally spaced lines. The numbers in the circles represent the number of points skipped. The number of points is set by the <u>Line Count</u> control. You will need to click on the <u>Clear Button</u> or select a new <u>Background Color</u> to reset the number of points.

**Hex Star, Full Line** 6 pointed Star inside a Hexagon. Lines are drawn from Corner to Corner. This Element may not be <u>stretched</u>.

**Hex Star, Half Line** 6 pointed Star inside a Hexagon. Lines are drawn to the midpoint of each line. This Element may not be <u>stretched</u>.

**Penta Star, Full Line** 5 pointed Star inside a Pentagon. Lines are drawn from Corner to Corner. This Element may not be <u>tiled</u> or <u>stretched</u>.

**Penta Star, Half Line** 5 pointed Star inside a Pentagon. Lines are drawn to the midpoint of each line. This Element may not be <u>tiled</u> or <u>stretched</u>.

**Hexagon** Regular Hexagon. Lines are drawn from corner to corner. This Element may not be <u>stretched</u>.

**Pentagon** Regular Pentagon. Lines are drawn from corner to corner. This Element may not be <u>tiled</u> or <u>stretched</u>.

**Square, Sides, Full Line** Square with lines from the Center to the midpoint of each side. Lines are drawn from corner to corner. This is the default element at startup.

**Square, Corners, Full Line** Square with lines from the Center to the Corners. Lines are drawn from corner to corner.

**Square, Corners, Half Line** Square with lines from the Center to the Corners. Lines are drawn to the midpoint of each line.

**Square, All, Half Line** Square with lines from the Center to the midpoint of each side and from the Center to the Corners. Lines are drawn to the midpoint of each line.

**Square, All, Full Line** Square with lines from the Center to the midpoint of each side and from the Center to the Corners. Lines are drawn from corner to corner.

**Hexagon, Corners, Half Line** Hexagon with lines from the Center to the Corners. Lines are drawn to the midpoint of each line. This Element may not be <u>stretched</u>.

**Hexagon, Corners, Full Line** Hexagon with lines from the Center to the Corners. Lines are drawn from corner to corner. This Element may not be <u>stretched</u>.

**Pentagon, Corners, Half Line** Pentagon with lines from the Center to the Corners. Lines are drawn to the midpoint of each line. This Element may not be <u>tiled</u> or <u>stretched</u>.

**Pentagon, Corners, Full Line** Pentagon with lines from the Center to the Corners. Lines are drawn from corner to corner. This Element may not be <u>tiled</u> or <u>stretched</u>.

### **Color Print**

If Color Print is Checked, the pattern will be printed in color on a color printer. The <u>background color</u> will be printed unless it is White. If a regular printer supports gray scale, the image will be printed in shades of gray; otherwise the results will be unpredictable.

If Color Print is not checked, the pattern will be printed in with black lines only. Color Settings will be ignored. **Note:** Toggle Color Print by selecting Color Print with the mouse.

## Tiled

Squares and Hexagons may be tiled or tessellated across a plane figure. Line Designer will display this tiling in the manner you select.

Custom Colors You may use any of the colors available for your display. The standard Windows Color Dialog will be displayed.

Close Button Exits Line Designer.

Max Button Maximizes Line Designer. This is useful if you want to avoid random mouse clicks. The controls are not resized.

**Display Button** <u>Displays</u> your <u>Element</u> according to the <u>Pattern</u> you have selected.

Registration Name Enter your name exactly as it is on your registration letter.

Registration Number Enter your Registration Number exactly as it is on your registration letter.

Register Button Press this button to register Line Designer. If the information you have entered is correct, Line Designer will be registered.

Cancel Button Press this button to close the form without making changes.

Line Designer Icon This is the Line Designer Icon. If you have already registered Line Designer, this button will allow you to view your registration information.

## Version Information

This area displays the latest version information. This is important if you are seeking technical support or want to know if you should upgrade.

Registration Information Name of the person Line Designer is registered to.

Registration Form Displays the registration form. To register, print this form and send it to me. You may also register using Compuserve. Registration ID:

Enter Registration Number Press this button after you register Line Designer You will be prompted for your registration information.

OK Button Closes this form.

# Copyright And Registration Address Send your registration fee to this address

Registration Instructions A short version of the registration instructions. Press Registration Form for more information

About the Author Displays a short biographical selection.

Registration Code Entering the registration code disables the startup reminder. You will receive instructions when you register.



\$10 for other upgrades.

- Number Fill: Place digits 1-9 in a grid so that numbers are unique to rows, columns, and small boxes. \$10. (Win 95 release 1st week of December, 1995)
- Number Sum: Place digits 1-9 on a grid so that numbers add up to target numbers at the edges. \$10. (Win 95 release mid December, 1995)
- **Classroom Helper:** A Classroom Management tool for Teachers. \$50. (Win 95 release mid January, 1996)

Shipping/handling is \$5 for any number of the above. Upgrade policy: Free if you download. (The registration code will not change) \$5 for shipping and handling if you upgrade from the most recent whole number release. (1.x to 2.x)