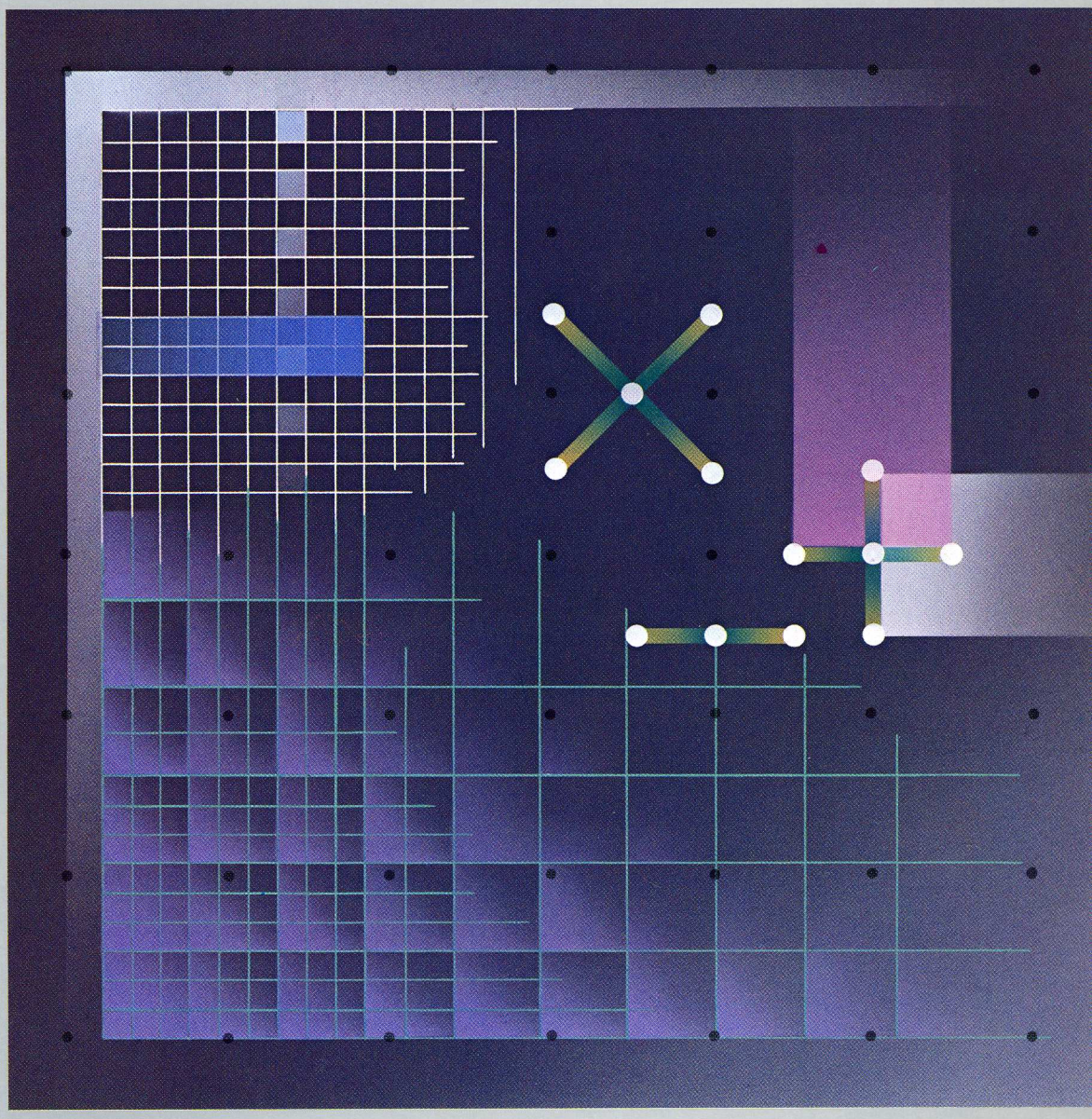
LisaCalc



LisaCalc is a powerful electronic spreadsheet and financial modeling tool that helps you grasp the impact of even the most complex financial scenario. Its huge worksheet (255 rows by 255 columns) lets you test every variable that affects your decisions. And it's easy, because LisaCalc eliminates the need to learn a modeling language.

Once you've created a spreadsheet, LisaCalc lets you transfer that information into other LisaCalc documents, into LisaGraph for graphing, or into LisaWrite for inclusion in a memo or report.

In less than 30 minutes you'll be doing useful work with LisaCalc. Lisa's revolutionary Graphics Mouse Technology™ replaces confusing computer commands with simple graphic images.

Graphics, together with the mouse, a simple selecting device, let you create, revise, and print documents intuitively. And because basic operations work the same way in all Lisa™ applications, you'll learn other applications in even less time.

LisaCalc spreadsheets and models enable you to see the important numbers in your profession clearly. They help you to make better, faster decisions and communicate them more effectively.

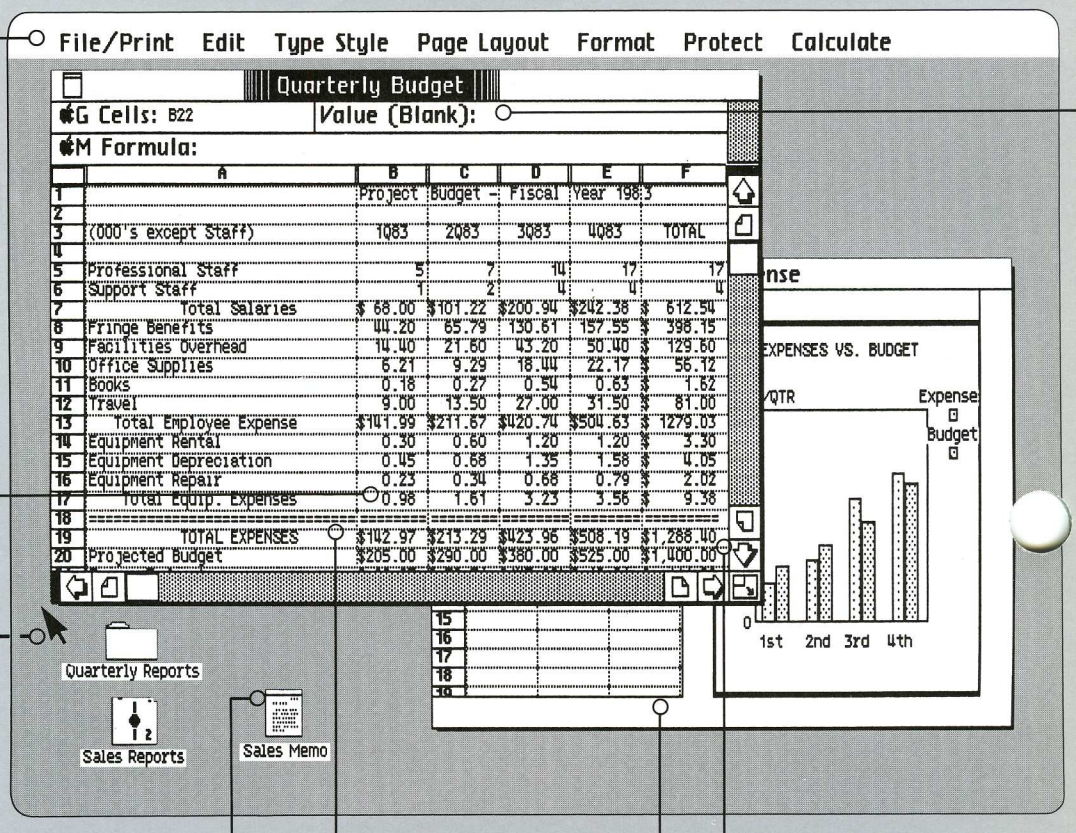
Perform arithmetic analyses quickly and easily.
- No special computer language or commands are required.
- Use built-in functions and arithmetic operators, or create your own formulas.

Analyze business and technical scenarios by examining "What if?" possibilities.
- Assumptions and formulas are easy to edit.
- Spreadsheets recalculate automatically when new data is entered.
- To view how changes affect different portions of the model, split the screen horizontally, vertically, or in both directions.

Graph data for further analysis or added impact.
- Move data quickly and easily into LisaGraph for plotting.
- Your LisaCalc model and LisaGraph plot can be viewed on the same screen simultaneously.

This is the **LisaCalc** worksheet with data entered in the sheet's cells. You use the mouse to point to a cell, then enter data into that cell by typing in the numbers, formulas, or text you want. The program instantly computes all the information entered on the worksheet to produce answers to extremely complex problems.

Menu Bar All LisaCalc functions are selected from the menu bar. To print a document, for example, just move the mouse and select PRINT from the menu bar. Once printing is under way, you may continue working with Lisa, either in the same document, or in another application.



	A	B	C	D	E	F
1		Project	Budget -	Fiscal	Year 1983	
2						
3	(000's except Staff)	1Q83	2Q83	3Q83	4Q83	TOTAL
4						
5	Professional Staff	5	7	14	17	17
6	Support Staff	1	2	4	4	4
7	Total Salaries	$ 68.00	$101.22	$200.94	$242.38	$ 612.54
8	Fringe Benefits	44.20	65.79	130.61	157.55	$ 398.15
9	Facilities Overhead	14.40	21.60	43.20	50.40	$ 129.60
10	Office Supplies	6.21	9.29	18.44	22.17	$ 56.12
11	Books	0.18	0.27	0.54	0.83	$ 1.82
12	Travel	9.00	13.50	27.00	31.50	$ 81.00
13	Total Employee Expense	$141.99	$211.67	$420.74	$504.83	$ 1279.03
14	Equipment Rental	0.30	0.60	1.20	1.20	$ 3.30
15	Equipment Depreciation	0.45	0.68	1.35	1.58	$ 4.05
16	Equipment Repair	0.23	0.34	0.68	0.79	$ 2.02
17	Total Equip. Expenses	0.98	1.61	3.23	3.56	$ 9.38
18						
19	TOTAL EXPENSES	$142.97	$213.29	$423.96	$508.19	$ 1,288.40
20	Projected Budget	$205.00	$290.00	$380.00	$525.00	$ 1,400.00

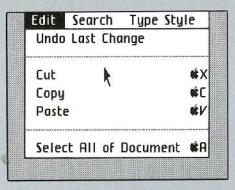
Mouse/Pointer The mouse is a palm-size device that controls Lisa's pointer. It replaces all confusing special function keys and commands. The mouse is connected to Lisa by a thin cable. When you move the mouse, Lisa's pointer matches the movement on the screen.

Cells A cell is the intersection of a column and a row. You can use the mouse (or the keyboard) to select a cell, then you can enter text or numerical values.

Desktop Manager The Desktop Manager uses graphic symbols such as these to coordinate all the system's operations. For example, to work on a document, simply use the mouse to select an existing document or create a new one. When you're finished, use the mouse to put the document into a folder. The Desktop Manager also enables you to work with more than one document at a time.

Columns and Rows The maximum number of columns and rows is 255. The width of each column may be set individually from 1 to 80 characters.

LisaGraph More than one Lisa document may be on the screen at one time. To move information from LisaCalc to LisaGraph for example, simply use the mouse to select COPY from the EDIT menu. When you're ready to transfer the information into another document, select PASTE and your data is transferred—you don't even have to touch the keyboard.



Scrolling To view another part of your worksheet, simply use the mouse to select the arrows or pages in the corners of the document. Similarly, to stretch or contract the document, use the mouse to move the box at the bottom right-hand corner.

Status Panel These two lines provide information about the cell on which you are working. CELLS shows the coordinates (location) of the cell; VALUE shows the same data that appears in the cell; and FORMULA states the calculation (if any) that has been performed (such as, A1 + B1 + C1).

Insert LisaCalc results into LisaWrite documents.

- Move your spreadsheet or model into a LisaWrite document as simply as you perform any basic editing.
- Revise or reformat a LisaCalc spreadsheet while in LisaWrite.

Customize models with different formats or typestyles.

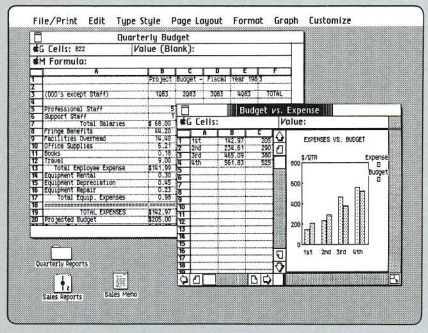
- Modify your format with the mouse—no retyping required.
- Vary the width of your columns with the mouse.
- Show currency with or without cents, commas, or dollar signs.

Standardize data collection, and reports with formatted spreadsheets.

- Data entry personnel can be prompted by the CIRCLE MISSING VALUES feature.
- Protection feature ensures that a model cannot be over written accidentally.

Use special features to analyze financial and scheduling problems.

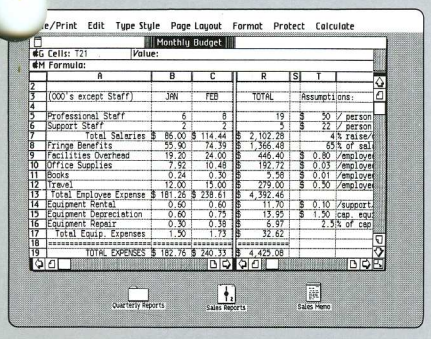
- Numbers are calculated to 15 digits.
- Built-in financial functions include net present value, annuity, and compound interest.
- Maximum model size is 255 rows by 255 columns.
- Dates, such as 1/4/82, and durations, such as 6 days or 3 years, can be built into your model.
- Built-in calendar adds or subtracts any number of days, weeks, months, or years (including leap years) to or from dates.



LisaCalc data can easily be graphed in LisaGraph. Transferring the data between the two requires only three quick steps. Similar steps will incorporate a LisaCalc model into a LisaWrite document.

Putting LisaCalc Data Into Graphs and Reports

- LisaCalc data can be transferred into LisaGraph or LisaWrite easily—use the mouse and the functions CUT and PASTE.
- After transfer into LisaWrite, LisaCalc worksheets can be edited, reformatted, given titles, footnotes, bold text, and much more.



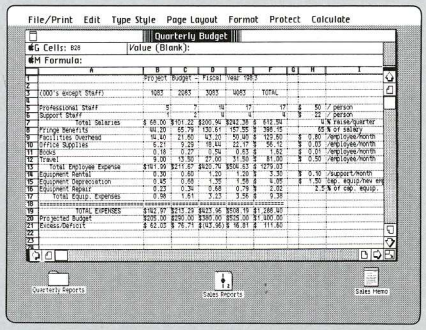
Splitting the screen opens windows into different portions of the model, allowing you to see the effects of changes immediately. More than one model can also be viewed on the screen simultaneously.

"What If?" Scenarios

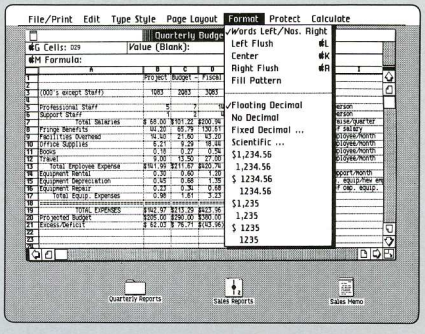
- Changing assumptions and formulas is radically simplified with LisaCalc—just point with the mouse, then type.
- Enter new data and LisaCalc recalculates automatically, quickly illustrating the impact on any scenario.
- To display important data from widely separated areas, worksheets can be "split" horizontally, vertically, or in both directions at once.
- Any model can be protected against inadvertent changes.

Special Features for Scheduling and Finance

- Calculations are made to 15 digits for unsurpassed accuracy.
- Built-in functions include net present value, annuity factor, and compound interest factor.
- Dollars and cents can be formatted as desired.
- LisaCalc acknowledges dates (e.g., 1/4/82) and durations (e.g., 6 days or 3 years).
- A built-in calendar accurately adds or subtracts days, weeks, months, or years.
- LisaCalc automatically checks all dates to ensure their consistency.



Customizing your LisaCalc model can be done at any time and requires no special commands. Use the mouse to "stretch" any column or format its contents.



Special program functions make it easy to learn and use LisaCalc. Move the mouse to select one of the menu titles at the top of the screen. Press the mouse button and the menu appears. Select a function and LisaCalc does the rest.

Customizing LisaCalc Worksheets

- Modifications require no typing—simply use the mouse.
- Columns can have different widths.
- Columns and rows may be added or deleted at any time.
- The contents of columns, rows, cells, and ranges of cells can be centered, or justified left or right.
- Currency can be shown with or without cents, commas, or dollar signs.
- A variety of typestyles is available.
- Page breaks are automatic; they can also be set manually.

LisaCalc and Standardized Analyses and Reports

- LisaCalc creates standard templates for uniform data collection.
- LisaCalc templates can be filled in without learning LisaCalc.
- "Protection" features ensure that established templates cannot be changed accidentally.
- CIRCLE MISSING VALUES feature helps any data entry person place data in the right location.
- Arrow keys, numeric keypad, and mouse make data entry fast.

LisaCalc—An Overview

- LisaCalc eliminates the need to learn a modeling language or special computer commands. The most complex models can be represented on LisaCalc's spreadsheet.
- Data analysis is simplified by built-in functions that include sum, average, net present value, if-then, and many more.
- Common arithmetic operators such as +, −, ×, ÷ are available.
- LisaCalc models can be as large as 255 columns by 255 rows.
- Maximum size of a LisaCalc model visible on the screen is 13 columns (of eight characters) by 28 rows.

LisaCalc

Specifications

Basic learning time:
- Less than 30 minutes.

Maximum worksheet size:
- 255 rows by 255 columns.
- Maximum model size visible—13 columns (8 characters wide) by 28 rows.

Precision and accuracy:
- Standard IEEE numerics for calculations and formatting provide unsurpassed accuracy.
- 15 digits for high-precision calculations.

Editing:
- Editing is done the same way as in other Lisa applications.
- Intracell editing.
- Cut and paste, copy, move, replace, delete.
- Insert new rows or columns.
- Copy values or formulas into other models.

Formatting:
- Left and right justification, and centering.
- Fit as many as 132 columns on an 8½ × 11-inch (215 x 279 mm) page.
- Variable column widths (1 to 80 characters).
- Integer, decimal, and exponential numbers, with variable number of digits after decimal or exponent.
- Various money formats (commas, dollar signs, cents).
- Brackets for negative money values.
- Fill pattern format.

Functions:
- +, −, ×, ÷.
- =, <, >, ≥, ≤, <>, AND, OR, NOT.
- Integer division, remainder.
- Sum, average, minimum, maximum, count, exponent.
- If-then-else.
- NPV, compound interest factor, annuity factor.
- Absolute value, integer portion, round off.
- Log, natural log, square root, sum of squares.
- Lookup, NA, error.
- Sin, asin, cos, acos, tan, atan.

Date/calendar:
- Specify dates as mm/dd/yy.
- Specify date parts as a number of days, months, or years.
- Add, subtract, and compare dates or date parts.
- Many functions work with dates or date parts.

Calculation features:
- Automatic and manual recalculation.
- Calculates until convergence is achieved.

Data exchange:
- Move data and models between LisaCalc documents.
- Move data and text into LisaGraph and LisaWrite.

Special features:
- "Protection" guards cells from being accidentally changed.
- CIRCLE MISSING VALUES highlights cells that are referenced in a formula but do not contain valid data.
- UNDO function cancels the effects of last operation.
- REVERT TO PREVIOUS VERSION undoes all changes made to the document since it was last saved.
- Up to 6 vertical or horizontal splits of the window.
- More than one worksheet on the screen at once.

Printing:
- "What you see is exactly what you get" fidelity.
- Automatic or manual page breaks.
- Print formulas or values.
- Apple's high-resolution Dot Matrix Printer (160 x 144 dots per inch; 6.2 x 5.6 dots per mm).
- Apple's Daisy Wheel Printer.
- Print one or multiple copies.
- Print whole model or selected pages.
- Print in horizontal or vertical formats.
- A variety of typestyles are available, including a small, 15-pitch size.
- Paper can be 8½ x 11 (215 x 279), 8½ x 14 (215 x 355), or 11 x 14 (279 x 355 mm) inches.

Documentation:
- Brief orientation guide to get you started in 30 minutes.
- Complete reference guide.
- Extensive step-by-step tutorial.
- Handy reference card.

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