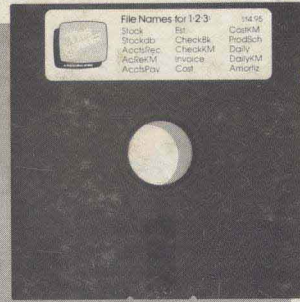


The Power™ Of:

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1-2-3 ON DISKETTE

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ABC COMPANY STATEMENT OF CASHFLOW

	Year 3	Year 4	Year 5
	-----	-----	-----
	99825	109808	
Total			
Financ			
Princ			
Inter			
Total F			
Total Ca			
PRE-TAX CA			
Less: Income Tax	50		
	-----	-----	-----
Net Proceeds - Disposition			
Less: Capital Gain's Tax			
AFTER TAX CASH FLOW	8582	9819	11180
	=====	=====	=====
Internal Rate of Return	30.13		

***** WORKSHEET AREA - DO NOT PRINT *****

Annual Payment	7587	7587	7587	7587	7587
Principal Balance	49913	49814	49699	49567	49416
Internal Rate of Return	30.1315	0	0		

One of a series of instructional manuals on the use and application of computer programs.

The PowerTM Of: 1-2-3TM

by
Robert E. Williams



vis
Management Information Source, Inc.

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Edited by: Estelle Phillips

ONE OF A SERIES OF INSTRUCTION MANUALS ON THE USE AND
APPLICATION OF COMPUTER PROGRAMS

PREFACE

The Power Of: 1-2-3 is a book of exercises designed especially for users and potential users of the 1-2-3 computer program. By performing these simple step-by-step exercises, you will rapidly gain an ability to utilize the broad range of 1-2-3 capabilities that make it a most powerful software program available for personal size computers.

Better than an instruction book, The Power Of: 1-2-3 demonstrates the use of 1-2-3 features through specific application samples.

The Power Of: 1-2-3 will show you how to apply the many functions of 1-2-3, such as its built-in Data Base, Keyboard Macros, Graphing, and many other powerful functions and commands, no matter what your applications. These ten easy-to-follow exercises are designed to help you understand and use 1-2-3 operations. Business owners, accountants, financial analysts, stock brokers, homeowners, manufacturers, engineers, educators, scientists, architects, students, or anyone with a problem that can be solved using a computer, will find The Power Of: 1-2-3 an invaluable companion to their 1-2-3 program.

No special training is needed to benefit from the exercises in The Power Of: 1-2-3. All instructions are in plain English. The logic of each step is clearly spelled out, so you can later apply the information to your specific needs. The Power Of: 1-2-3 will become your most valuable reference book as you expand your use of 1-2-3.

**IF YOU OWN, OR ARE THINKING OF OWNING, 1-2-3,
YOU SHOULD OWN THIS BOOK!**

INTRODUCTION

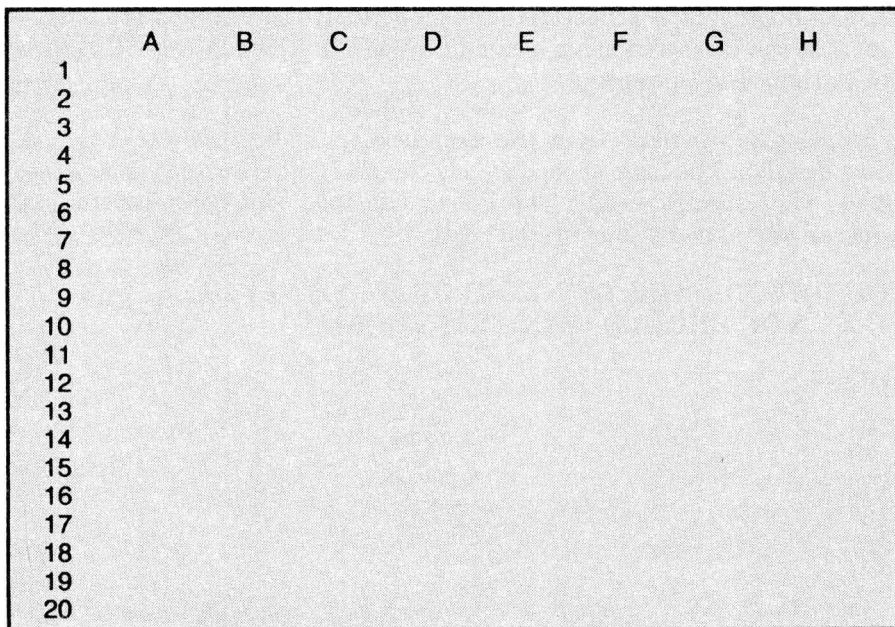
The exercises in this book have been purposely designed to provide an opportunity to easily follow the logic of 1-2-3 functions, and then apply those functions to specific problems. It is important to note that the problems in the exercises have been specifically selected to demonstrate 1-2-3, as opposed to illustrating specific problem-solving methods.

Each exercise in The Power Of: 1-2-3 is self-contained. Each demonstrates some special ability or abilities that will broaden your knowledge and skills in using 1-2-3 as a problem-solving tool for your special applications.

The 1-2-3 format is arranged on the computer screen in columns and rows. The 1-2-3 worksheet format is illustrated in Figure 1 with a grid superimposed on it to offer a visual concept for the following explanation.

The 1-2-3 worksheet columns are identified by letter designations, the rows by numbers. Each position where a column and row intersect is a "coordinate" location. Visualizing your worksheet as a street map, you can locate any coordinate on your worksheet using a letter and a number designation (such as B4) to identify its distinctive column and row intersection.

The relationships between values in coordinates on your worksheet are determined by simple instructions entered into the coordinates in the form of algebraic formulas. (Don't get panicky; that just means $(a + b)$ and other similar expressions.) By visualizing the street map grid image and following the exercises, you will easily and quickly catch on to the power of 1-2-3 and how it can work for you.

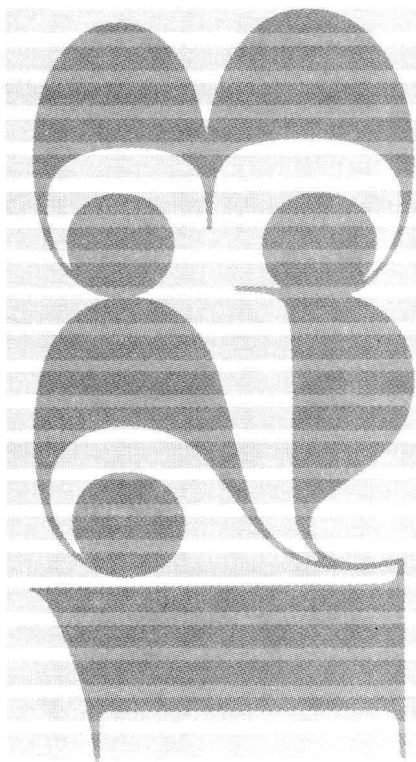


	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Figure 1

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EXERCISE ONE	1
MAINTAINING A STOCK PORTFOLIO	
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EXERCISE ONE

MAINTAINING A STOCK PORTFOLIO

DESCRIPTION

The Lotus 1-2-3 program has many built-in commands and functions, two of the more powerful ones will be demonstrated in this exercise: Data Base and Graphics.

To demonstrate these capabilities, we have set up a stock portfolio exercise where we will maintain the stock portfolio with current and past information on stocks and then draw out information from the worksheet using different criteria, for example: stocks with a gain; changing the criteria to display stocks with a loss; and then simultaneously graphing this information.

OPERATIONS PERFORMED

Setting Up The Worksheet Format

Entering Mathematical Formulas

Setting Up a Data Base

Graphing the Data

Viewing the Graph

Saving

Printing the Worksheet

Printing the Graph

Making New Entries into the Data Criteria

FUNCTIONS USED

AVG

SUM

COMMANDS USED

COPY

DATA

copies formulas

defines Input range

defines Output range

defines Criteria range

executes Query of data base

GRAPHIC

FILE

FILE

PRINT

RANGE

RANGE

RANGE

REPEAT

SAVE

WORKSHEET

saves worksheet

retrieves (loads)

prints worksheet

erases

centers labels

formats in percent

repeats dashed lines

saves graph

deletes row

SETTING UP THE WORKSHEET FORMAT

Using the following directions, set up your worksheet by copying Figure 1 exactly as it is illustrated, retaining exact row and column locations of all information.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Risk Free Return		0.12											
2														
3	Company			Purchase	Market	Purchase	Market				Expected	Return		
4	Name	Ticker	Shares	PPrice	MPrice	PGross	MGross	Gain \$	Gain %	Beta	Return	Ratio	Low Est	High Est
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15	Sub Totals													
16	Cash On Hand													
17														
18	Totals													

Figure 1

Enter your column headings.

After entering your column headings, you will center them in the columns by using the Center option.

Place your cursor on A3 and type:

- /R starts RANGE command
- L selects Label-Prefix option
- C selects Center option
and displays Range of labels
A3..A3

1 EXERCISE Maintaining A Stock Portfolio

Move your cursor to N4. Notice the screen is reversing to show you what coordinates are to be formatted.

RETURN executes the command

To enter dashed lines on your worksheet, place your cursor on the left-most column of the row where you want the line (A5 in this example.)

Type:

\ starts REPEAT command

— label to be repeated

RETURN executes the command

The column your cursor is on will now have a line of dashes across its width. To extend the dashed line in the same row across the remaining columns, leave your cursor where it is and type:

/C starts COPY command
and displays Range to copy from

RETURN displays Range to copy to

B5 first coordinate to copy to

• ellipsis—indicates from-to

N5 last coordinate to copy to

RETURN executes the command

The dashed line will now appear extended across the columns you have indicated by your coordinates. To enter a double-dashed line on the worksheet, repeat the operations above, using the symbol = as your label to be repeated.

ENTERING MATHEMATICAL FORMULAS

You will now begin entering mathematical formulas that will establish the relationships between column and row positions. The formulas and their locations are illustrated in Figure 2.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Risk Free Return		0.12											
2	-----													
3	Company		Purchase	Market	Purchase	Market						Expected	Return	
4	Name	Ticker	Shares	PPrice	MPrice	PGross	MGross	Gain \$	Gain %	Beta	Return	Ratio	Low Est	High Est
5	-----													
6	+C6*D6				0	0	0	ERR			ERR	ERR		
7	+C6*E6				0	0	0	ERR			ERR	ERR		
8	+G6-F6				0	0	0	ERR			ERR	ERR		
9	+H6/F6				0	0	0	ERR			ERR	ERR		
10	@AVG(M6,N6)/E6)^.25-1				0	0	0	ERR			ERR	ERR		
11	(K6-1)/J6				0	0	0	ERR			ERR	ERR		
12					0	0	0	ERR			ERR	ERR		
13					0	0	0	ERR			ERR	ERR		
14	-----													
15	Sub Totals		0	@SUM(C6,C13)		0	0	0						
16	Cash On Hand													
17	-----													
18	Totals		@SUM(G16,G15)				0							

Figure 2

Formula one, in the Purchase Gross column, multiplies the Shares times the Purchase Price.

Place your cursor on F6 and type:

+ prepares the coordinate to accept a numeric expression
 C6 coordinate containing Shares
 * multiplies
 D6 coordinate containing Purchase Price
 RETURN enters the formula

Formula two, in the Market Gross column, multiplies the Shares times the Market Price.

Place your cursor on G6 and type:

+ prepares the coordinate to accept a numeric expression

1 EXERCISE Maintaining A Stock Portfolio

C6	coordinate containing Shares
*	multiplies
E6	coordinate containing Market Price
RETURN	enters the formula

Formula three, in the Gain \$ column, subtracts Purchase Gross from Market Gross.

Place your cursor on H6 and type:

+	prepares the coordinate to accept a numeric expression
G6	coordinate containing Market Gross
—	subtracts
F6	coordinate containing Purchase Gross
RETURN	enters the formula

Formula four, in the Gain % column, gives you the percent of dollars gained, by dividing Gain \$ by Purchase Gross.

Place your cursor on I6 and type:

+	prepares the coordinate to accept a numeric expression
H6	coordinate containing Gain \$
/	divides
F6	coordinate containing Purchase Gross
RETURN	enters the formula

To display the value as a percent, 1-2-3 allows you to format the coordinate to show a percent sign and automatically moves the decimal place to two places to the right.

To do this, leave your cursor on I6 and type:

/R	starts RANGE command
F	selects Format option
P	selects Percent option
2	number of decimal places

RETURN displays range to format

RETURN executes the command

An ERR will be displayed until values are entered in the appropriate columns because of the division by zero.

Formula five, in the Expected Return column, first generates the average of the High and Low Estimates, then divides that by the Market Price. Then the result is taken to the .25 power and 1 is subtracted from it, which gives you the percentage per year of a four-year period.

The High and the Low Estimates, in this exercise, were taken from the Value Line Investment Survey newsletter, which gives you the high and low for a four-year period.

Place your cursor on K6 and type:

(parenthesis—opens expression
@AVG(averages the following list
M6	coordinate containing Low Est
,	comma—separates values in list
N6)	coordinate containing High Est
/	divides
E6	coordinate containing Market Price
)	parenthesis—closes expression
^.25	takes the value generated to the .25 power
—1	subtracts 1
RETURN	enters the formula

Formula six, in the Return Ratio column, subtracts the Risk Free Return from the Expected Return percentage, which is then divided by the Beta percentage.

The Beta percentage was taken from the Value Line Investment Survey newsletter.

NOTE

1-2-3 is designed to do one of two things with coordinates when they are copied. The coordinates are either relative to their new location or they remain absolute, which means they remain the same.

A coordinate address is relative unless it is converted to an absolute by having a dollar sign (\$) preceding the column designation and/or row designation, i.e., (\$G\$8).

A quick way to make a coordinate absolute is by putting the cursor on that coordinate and pressing the F4 key, which will place the dollar as shown automatically.

1 EXERCISE Maintaining A Stock Portfolio

Place your cursor on L6 and type:

(K6	coordinate containing Expected Return
—	subtracts
\$C\$1)	coordinate containing Risk Free Return Note: The dollar signs turn the coordinate into an absolute address.
/	divides
J6	coordinate containing Beta
RETURN	enters the value

To display Expected Return and Return Ratio as percentages, leave your cursor on any location and type:

/R	starts RANGE command
F	selects Format option
P	selects Percent option
2	number of decimal places
RETURN	displays range to format
K6.L6	range
RETURN	executes the command

The next operation is to copy the formulas just entered down their appropriate columns, between the single and double dash lines.

Leave your cursor on any location and type:

/C	starts COPY command and displays Range to copy from
F6	first coordinate to copy from
•	ellipsis—indicates from-to

L6	last coordinate to copy from
RETURN	displays range to copy to
F7	first coordinate to copy to
•	ellipsis—indicates from-to
F13	last coordinate to copy to
RETURN	executes the command

Formula seven, in the Sub Total row in the Shares column, adds the total shares.

Place your cursor on C15 and type:

@SUM(adds values in following list
C6	first coordinate in list
•	ellipsis—indicates from-to
C13)	last coordinate in list
RETURN	enters the formula

Copy formula seven across the row into the Purchase Gross, Market Gross and Gain \$ columns.

Leave your cursor on C15 and type:

/C	starts COPY command and displays range to copy from
RETURN	displays range to copy to
F15	first coordinate to copy to
•	ellipsis—indicates from-to
H15	last coordinate to copy to
RETURN	executes the command

Formula eight, in the Totals row, Market Gross column, adds the Market Gross subtotal to Cash On Hand.

Place your cursor on G18 and type:

@SUM(adds values in the list
G16	coordinate containing Cash On Hand
,	comma—separates values in list

1 EXERCISE Maintaining A Stock Portfolio

G15) coordinate containing Market Gross subtotal

RETURN enters the formula

Now that the formulas are entered, enter the values as illustrated in Figure 3. Enter into the following columns: Ticker, Shares, PPrice, MPrice, Beta, Low Est and High Est. Enter the Cash on Hand amount. Do not make entries into columns which contain formulas, or the formulas will be erased.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Risk Free Return		0.12											
2	-----													
3	Company		Purchase	Market	Purchase	Market	Expected Return							
4	Name	Ticker	Shares	PPrice	MPrice	PGross	MGross	Gain \$	Gain %	Beta	Return	Ratio	Low Est	High Est
5	-----													
6		blt	300	21	26.25	6300	7875	1575	25.00%	0.8	37.01%	31.26%	85	100
7		cty	325	42	30	13650	9750	-3900	-28.57%	0.9	13.62%	1.80%	40	60
8		dtr	450	17	34	7650	15300	7650	100.00%	0.5	-7.87%	-39.73%	17	32
9		sdt	400	30	34	12000	13600	1600	13.33%	0.9	41.55%	32.83%	127	146
10		iba	600	56	25	33600	15000	-18600	-55.36%	0.7	34.78%	32.54%	68	97
11		vbn	450	78	25	35100	11250	-23850	-67.95%	0.5	5.10%	-13.81%	29	32
12		lnd	200	60	17	12000	3400	-8600	-71.67%	0.6	59.85%	79.75%	72	150
13		abu	475	75	82	35625	38950	3325	9.33%	0.8	-20.96%	-41.20%	28	36
14	=====													
15	Sub Totals		3200			155925	115125	-40800						
16	Cash On Hand						12000							
17	=====													
18	Totals						127125							

Figure 3

SETTING UP A DATA BASE

1-2-3 has some powerful, built-in commands: a Data and a Graphic command. The data command allows you to define the information into a data base, and the graphic command allows you to plot information instantaneously.

To demonstrate the use of the Data command on the information you have just entered in Figure 3, setting up of the Data base requires three processes: the input, the output and the criteria of the data base. Use the following directions and refer to Figure 4.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Risk Free Return		0.12											
2	-----													
3	Company													
4	Name	Ticker	Shares	Purchase PPrice	Market MPrice	Purchase PGross	Market MGross	Gain \$	Gain %	Beta	Expected Return			
5	bll		300	21	26.25	6300	7875	1575	25.00%	0.8	37.01%	31.26%	85	100
6	cty		325	42	30	13650	9750	-3900	-28.57%	0.9	13.62%	1.80%	40	60
7	dtr		450	17	34	7650	15300	7650	100.00%	0.5	-7.87%	-39.73%	17	32
8	sdt		400	30	34	12000	13600	1600	13.33%	0.9	41.55%	32.83%	127	146
9	ibm		600	56	25	33600	15000	-18600	-55.36%	0.7	34.78%	32.54%	68	97
10	vbn		450	78	25	35100	11250	-23850	-67.95%	0.5	5.10%	-13.81%	29	32
11	lnd		200	60	17	12000	3400	-8600	-71.67%	-0.6	59.85%	79.75%	72	150
12	abu		475	75	82	35625	38950	3325	9.33%	0.8	-20.96%	-41.20%	28	36
13	=====													
14	Sub Totals			3200			155925	115125	-40800					
15	Cash On Hand						12000							
16	=====													
17	Totals							127125						
18														
19	Shares Gain \$		CRITERIA RANGE											
20			+H5>0											
21			+C5>=300											
22	Ticker	Shares	PPrice	MPrice	OUTPUT RANGE									
23														
24														
25														
26														
27														
28														
29														
30														

Figure 4

Before defining the input range, you will need to delete Row 5 because your input range, first row, contains title information and the following rows must contain only data information.