## FEDERAL INCOME TAX

Programs for the HP-41 by<br>Anthony A. Vertuno

1986 Taxes


# Federal Income Tax <br> Programs for the HP-41 <br> by <br> Anthony A. Vertuno 

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Additional copies of this book may be ordered from the author at 2007 Alban Lane, Bowie, Maryland 20716. The programs are also available prerecorded on disk or cassette ( $\$ 12.50$ ), magnetic cards ( $\mathbf{~} 20$ per set), or custom EPROMs ( $\mathbf{~} 25$ ) . Include $\$ 2.50$ with each order for handling and postage. Materials will be sent first class mail. Maryland residents add 5\% sales tax.

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Individual Income Tax<br>Programs for the HP-41<br>1936 Taxes<br>by Anthony A. Vertuna<br>Copyright 1987 Anthony A. Vertuno

## What the programs will do

This is a set of programs designed to make the computations needed for individual income taxes, and includes programs for:

* computing the amount of tax on any amount of taxable income, at either 1986 or 1987 tax rates
* Form 1040
* Itemized deductions (Schedule A)
* income Averaging (schedule G)
* Capital gains and losses (Schedule D)
* Capital loss carryover (Schedule D)
* self-employment tax (Schedule SE)
* married couple deduction (Schedule $W$ )
* Alternative minimum tax (Form 6251)


## What you can do with the programs

Because the programs are designed in modular fashion, you can use them individually, in various combinations, or as a complete system, according to your own requirements. You can, for example:

* start at the beginning of Form 1040 and work through the form.
* skip page 1 of the form and start at the top of page 2 with filing status, number of exemptions and adjusted gross income.
* use the itemized deduction program standing alone, have it called automatically from the Form 1040 program, or omit it and use a single number for net itemized deductions.
* omit the 1040 programs altogether, and use just the tax rate programs.
* use just the tax rate and income averaging programs.
* select and use various other program combinations that are convenient for you.
* execute the programs repeatedly without having to re-enter data that does not change.


## The programs are easy to use

Once you select and start execution of a program, proceed by using the [R/S] key to advance the program step by step, entering or changing input data where appropriate, and noting the output data produced by the calculator. Subprograms that you have selected by setting flags will be automatically called and executed. If you are using a printer, both input and output data will be printed automatically.

## The Programs

This book contains fourteen tax programs:

1. "RG" Computes the tax payable on given amounts of taxable income at 1986 rates.
2. "R7" Same as program "R6", except that it uses 1987 tax rates.
3. "R8" Same as program "R7", except that it uses 1988 tax rates.
4. "FT" Steps through Page 1 of Form 1040.
5. "P2" A continuation of the Federal Tax Program ("FT"), which steps through Page 2 of Form 1040. Can order execution of Frograms "SA", "SG", and "AT".
6. "SA" An itemized deduction program, which steps through Schedule $A$ of Form 1040.
7. "SG" Computes the tax due on an income averaging basis (Schedule G) and compares it to the tax payable without income averaging. Performs the computations relating to base years income on the top part of Schedule $G$.
8. "GQ" Same as program "SG" except that it assumes that the base years information is already available and it eliminates most output displays for faster running.
9. "DD" Computes the amount of Schedule D income to be reported on Form 1040. Computes the taxpayer's capital gain deduction. Computes the amount of any short-term or long-term capital loss carryover.
10. "AT" Computes the alternative minimum tax (Form 6251).
11. "LldN" Computes the married couple deduction (Schedule W).
12. "EE" Computes self-emplayment tax (Schedule SE).
13. "K" Contains subroutines used by the other programs.
14. "TX" A control program, used to direct execution of Programs "DD", "WW", "FT", and "P2".

## Input/Output Displays

All displays are labelled to show what they represent. In many cases, it has been possible to use mnemonic labels rather than line numbers from the tax forms so that the programs may be run without constant reference to the tax forms or other documentation.

CAUTION: The program labels for input and output and the descriptions in the program documentation are provided for convenience in using these programs. Refer to the tax forms and instructions to make sure that the data used in the programs are correct and appropriate for the use made.

Input Prompts (alpha-numeric with a colon (:) between the alpha portion and the number). Appropriate data is placed in the $X$ register and $[R / S]$ is pressed to advance the program. Numeric data appearing in the display may be left unchanged by pressing [R/S] without placing a new value in the $X$ register.

When a printer is used, the number of the register in which the input value is stored is printed to the left of the label for the value.

Setting Flag 03 will suppress all input prompts.
Output displays (alpha-numeric with an equals sign (=) between the alpha portion and the number). Data entry is not called for. Press [R/S] to proceed.

Setting Flag 04 will suppress most output displays. Some, however (those identified in the the individual program documentation by a $\#$ symbol), such as "bottom line" items for each program and certain significant intermediate results, are not suppressed by setting flag 04.

## Entering input data

All input data is stored and retained in data registers. The programs do not alter or erase the contents of the registers holdings input data.

Input data may be entered in two ways:

1) By executing [STO] nn (please refer to the Register Index or program printouts), or
2) By using the input prompts during program execution. If no change from the data displayed is desired, simply press [R/S] to continue. If you want to change the value displayed by an input prompt, place the new value in the $X$ register and press [R/S].

Free use of the stack is available whenever the program prompts for input. Use of data cards or files

If you will be working on the same tax return at different times, you may want to record the contents of data registers on cards or in a data file on cassette or in extended memory. This will allow you to save time in reloading the input data when running the programs at a later time.

## Display mode and rounding

Use display mode [FIX] 0 to represent rounded dollars or [FIX] 2 to represent dollars and cents.

Input data is stored and retained in data registers without rounding, but, for the purposes of calculation, will be rounded to the display mode used during the program run. Thus, it is possible to run both a dollar-rounded program and a dollars and cents program with the same input data.

Setting the display mode to use even dollars ([FIX] 0) helps to eliminate scrolling and thus improves program speed and makes the displays easier to read.

## Restarting during execution

If you have started a sequence of programs that are to be linked automatically, you may nevertheless restart Programs "AT", "DD", "FT", "F2", "SA", "SG", or "wlw" during their execution with a manual [XEQ] command without disrupting the sequence of automatic program calls.

## Using the Printer

The programs are completely printer compatible, and will run equally well with or without a printer. Printing is single-width (Flag 12 clear), Numeric values will be printed right-justified, with no wrap-around.

The printer should be used in MANLAL mode.

If a printout is made, all input displays will be preceded by a number designating the register in which the corresponding input value is stored. Refer to these register numbers to store or change input values.

If a printer is used, all input and output displays will be printed, regardless of the status of Flags 03 and 04; program execution will not stop for output displays.

Program execution will stop for input displays if Flag 03 is clear. Input displays will print the value currently held in the data register assigned to the input item. If new data is entered when the program prompts for input, the new value will also be printed.

Program execution will not stop for input displays if Flag 03 is set. Setting flag 03 while using the printer will cause the calculator to produce a single tape, printed nonstop, from the beginning to the end of the program called, including subprograms and subroutines called by the program.

The programs control printer operation by testing Flag 21. If a printer is available when you turn the calculator on, it will work with the programs. If you turn the printer off, you do not have to unplug it; simply clear flag 21 and the program will run as if the printer were absent. Remember to set Flag 21 again when you want to reactivate the printer. (This may be done quickly by turning the calculator off and on while the printer is plugged in.)

User Flags and program control
There are six flags that you can set and clear to control program execution.
a. Automatic program calls:

Flag 00: If set, Program "P2" will automatically call the itemized deduction program "SA" after displaying adjusted gross income.
Flag 01: If set, Program "P2" will automatically call the income averaging program "SG" after computing the tax payable on taxable income.
Flag 02: If set, Program "P2" will automatically call the alternative minimum tax program "AT" after displaying net tax after credite.

Note: See the description of automatic program replacement on the next page.
b. Input/output displays:

Flag 03: If set, program execution will not stop for input prompts.
Flag 04: If set, program execution will not stop for most output displays.
c. Printer use:

Flag 21: If clear, programs run normally with printer off.

## Automatic execution

If you make your own magnetic cards for these programs, recording the cards with Flag 11 set (for automatic execution) is recommended for all programs except "K", R6", "R7", "R8", and "GQ". This will cause the title prompt to appear automatically after the card is read, verifying that the correct program has been loaded.

## Program selection and memory management

You will see from checking the byte counts for the programs shown in the Program Summary Chart on page 7 that not all the programs will fit at one time in the main memory of an $H P-41$, even with maximum memory. If you have extended functions and extended memory or a cassette drive, you will probably want to use the automatic program replacement feature described in the following section.

If you are not using the automatic replacement feature, you may still be able to load all the programs that you need. If not, you will have to begin by loading those programs that you will need initially and then load additional programs manually (e.g., using the wand or magnetic cards) as you need them. For example, program "DD" (Schedule D) might be replaced later by program "SG" (Income Averaging). If you will be replacing programs, remember that, if you do not execute [GTO].. after loading a program, the loading of another program automatically clears it from memory.

## Automatic program replacement

The programs have a feature that provides for automatic replacement of the last program in memory with the next program needed from either extended memory (extended functions module and one extended memory module are needed) or the cassette drive. The calculator attempts to GTO and begin execution of a specified program. If that program is not in main memory, the calculator will search extended memory or the cassette drive, if either is present. If the program cannot be found, or if it cannot be loaded because of insufficient memory, program execution will halt and the message "NONEXISTENT" will appear. You must then restart after either making the the called program available or clearing the flag that caused the program to be called.

Program "P2" uses this feature to call Programs "SA", "SG", and "AT", if the appropriate flags are set. Progran "TX" uses it to call Programs "DD", "WW", and "FT".

You may use this feature directly to load and execute any program whose label is not more than six characters long. Execute "LP" (for "Load Program"). The calculator will prompt "PRGM?". Respond by keying in the name of the desired program and pressing [R/S].

## Recommended Key assignments

No local alpha labels are used in the programs.
The fallowing assignments of program labels are recommended.

$$
\begin{aligned}
& \begin{array}{c}
\text { Shifted: } \\
\text { Keys: }, ~ \\
\hline
\end{array}, \underline{H}, \frac{\text { LP }}{I}: \underline{J} \\
& \text { Unshifted: }
\end{aligned}
$$

If the programs are read from bar code or cassette while the calculator is in user mode, the key assignments shown here will be made. If you do not want these key assignments, just make sure that the calculator is not in user mode when loading the programs.

Key asignments for the unshifted keys in the second row have been omitted to allow for their assignment to alternate tax rate programs or state tax programs.

## Cassette and Disk -- Batch laad program

The cassette and disk prepared for use with this book are formatted for 100 records so that they can be used to store other programs and files without reformatting. They contain all the tax programs described in this book and a batch load program ("ZLOAD") for loading them into the calculator. To use "ZLOAD":

1) Place the program name "ZLOAD" in the Alpha Register and [XEQ] [READP]. The program will load and begin execution. It will load a set of core programs ("K", "R6", "P2", $\mathrm{XX"}^{\prime \prime}$ "GQ", "FT") into the calculator's main memory. It will then check to see whether extended memory is present and, if so, will save "FT", "DD", "WW", "SA", "SG", "AT", and "EE" to extended memory. Programs "R7" and "TS" are not included in the batch load.
2) When loading is complete, or when extended memory is full, a BEEP will sound and the prompt "XEQ CLP" will appeary. Execute [CLP] [ALPHA] [ALPHA] and the batch load program will be cleared.
3) Verify the load by executing CATALOG 1 and [EMDIR].

If extended memory is not available, you should have at least 156 free program registers in main memory before beginning this load.

A complete load requires 232 free program registers in main menory, the extended functians module, and one extended memory module.

## Program Summary Chart

This chart is provided to assist you in deciding how to configure your calculator. It shows, for each program, its name, function, byte count, program registers needed, and data registers (SIZE) needed, and where the program is loaded by the cassette batch load program.

This chart, together with the Register and Flag Indexes on the following pages, makes a useful quick reference guide to the programs.

| PRGM | FUNCTION | BYTES | $\begin{aligned} & \text { PRGM } \\ & \text { REGS } \end{aligned}$ | DATA REGS | PLACEMENT BY "ZLOAD"* | NOTES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AT | Altern. Min. Tax | 304 | 44 | 59 | $\times$ MEM | 5 |
| DD | Schedule D | 295 | 43 | 52 | $X$ MEM | 4 |
| EE | Schedule SE | 117 | 17 | 67 | $X$ MEM 4 | 2 |
| FT | Form 1040, p. 1 | 180 | 26 | 22 | $X$ MEM | 4 |
| GQ | Sched G "Quick" | 088 | 13 | 5 | MAAN MEM | 2 |
| K | Subroutines | 300 | 43 | -- | MAIN MEM | 1 |
| P2 | Form 1040, p. 2 | 329 | 47 | 31 | MAIN MEM | 2 |
| R6 | 1986 tax rates | 414 | 60 | 9 | MAIN MEM | 2,3 |
| R7 | 1987 tax rates | 190 | 28 | 9 | $\times$ MEM | 2,3 |
| R8 | 1988 tax rates | 091 | 13 | 9 | $\times$ MEM | 2,3 |
| SA | Schedule A | 299 | 43 | 49 | $\times$ MEM | 5 |
| SG | Schedule G | 238 | 34 | 55 | $\times$ MEM | 5 |
| TX | Contral program | 056 | 10 | -- | MAIN MEM | 2 |
| WW | Schedule W | 140 | 20 | 65 | $X$ MEM | 4 |

1. Program "K" must be in main memory in order to use the other programs.
2. Must be in main memory to be used. Not subject to automatic load from extended memory or cassette.
3. More than one tax rate program may be in main memory at the same time to do tax rate comparisons. However, only Program "R6" can be called as a subroutine by other programs ("P2", "SG", "GQ").
4. May be in main memory or called automatically by program "TX" from extended memory or cassette. Should your memory requirements permit, you may find it convenient to keep Program "FT" in main memory.
5. May be in main memory or called automatically by program "P2" from extended memory or cassette.
*Program "ZLOAD" is 122 bytes (18 program registers).

## Register Index

00 Scratch
01 Scrateh
02 Federal Taxable Income
03 Federal Tax Payable/Tax after averaging/Total tax
04 Line 07, Schedule $G$
05 Scratch
06 Federal Adjusted Gross Income (AGI)
07 Index Register
FORM 1040
08 Filing status
09 Number of exemptions
10 Wages
11 Interest received
12 Dividends received
13 Exclusion for dividends received
14 State Tax Refund
15 Schedule C Income
16 Schedule D Income
17 Schedule E Income
18 Other Income
19 Payments into and IRA or Keogh Plan (IRA)
20 Married Couple Deduction (SCH W)
21 Other adjustments
22 Net Deductions
23 Credits a: personal credits; line 44
24 Credits b: business credits; line 48
25 Self-employment tax
26 Alternative minimum tax
27 Other Taxes
28 Amount of Tax withheld
29 Other tax payments
30 Line 49 of form 1040 (FT49): net tax after credits

## SCHEDULE A

```
31 Amount spent for medicines and drugs
32 Amount spent for doctors, dentists, hospital bills and med. insurance
33 Amount spent for medical transportation
34 Other medical expenses
35 State Income Tax paid
36 Real Estate Tax
37 Sales Tax
38 Other Taxes
39 Mortgage interest paid
40 Credit card interest paid
41 Other interest paid
42 Total contributions
4 3 \text { Net casualty losses}
4 4 \text { Dues}
45 Tax preparation fee
46 Other miscellaneous deductions
4 7 \text { Net medical deductions}
48 Interest deduction other than home mortgage
```

SCHEDULE D

```
49 Capital Gains Deduction (CG0)
```

50 Net Short-Term Capital Gains
51 Net Lang-Term Capital Gains

SCHEDULE G (Income Averaging)

| 52 | 1983 taxable income |
| :--- | :--- | :--- |
| 53 | 1984 taxable income |
| 54 | 1985 taxable income |

FORM 6251 (Alternative Minimum Tax)
55 Net investment income
56 Other deductions (gambling losses and estate tax from Schedule A)
57 Preference items other than int. \& div. exclusions and $60 \%$ CGD
58 Foreign tax credit
SCHEDULE $W$ (Married couple deduction)
59 Wages \& tips, taxpayer a
60 Business, farm, \& partnership income, taxpayer a
61 Adjustments, taxpayer a
62 Wages \& tips, taxpayer b
63 Business, farm, \& partnership income, taxpayer b
64 Adjustments, taxpayer b
SCHEDULE SE (Self-employment tax)
65 Self-employment income
66 Social Security wages

## Flag Index

Set and cleared by user:
00 Automatic call of Program "SA" (itemized deductions) by Program "P2"
01 Automatic call of Program "SG" (income averaging) by Program "F2"
02 Automatic call of Program "AT" 〔alternative minimum tax) by Program "P2"
03 Suppresses input displays when set
04 Suppresses output displays when set
21 Programs run normally with printer off when clear
Set and cleared by programs:
05 Subprogram indicator
06 Subprogram indicator
07 Tax table adjustment indicator
08 Subroutine indicator for tax rate program "R6"
09 Used in tax rate programs to indicate filing status " 3 ";
flag set indicates automatic program call rather than manual program call
10 Used in routines "Y" and "V" to indicate non-suppressed output displays; used in routine "X" to record FIX 2 display setting.

Program "TX"
Control program
Program "TX" orders the sequential execution of the programs "DD" ESchedule D), "WW" (Schedule W, and "FT" (the federal tax Form 1040). Programs "DD" and "FT" will be automatically called from extended memory or cassette or disk drive (via routine "L") if not in main memory. If you do not want to run Programs "DD" or "WW", begin execution with Program "FT" or Frogram "P2". If Program "TX" is used, execution begins with the title prompt "INCOME TAX". Press [R/S] to continue.

Program "FT" (page 1 of Form 1040) calls Program "P2" (page 2 of Form 1040).
Program "P2" will call, if the appropriate flags are set, Programs "SA", "SG", and "AT".

Here is the order of execution of linked programs:

TX
DD
WW
FT
P2
SA (if Flag 00 is set)
SG (if Flag 01 is set)
AT (if Flag 02 is set)

Programs "R6", "R7", and "R8"
Federal Tax Rate Schedules

Other programs needed: "K"
These programs compute federal income tax according to the Tax Rate Gchedules $X, Y$, and $Z$ on a given amount of taxable income. The appropriate schedule is selected by the program on the basis of the status code entered by the user. and stored in R08.

All three programs may be executed standing alone. Program "Ro" may be executed as a subroutine of other programs. To provide for subroutine calls, Program "R6" has a second program label, "R".

These programs have no title prompts and begin execution immediately upon being called. Except for the status input prompt, discussed below, they run completely through without a pause.

Note: When the tax rate programs are executed as stand-alone programs, they provide tax on taxable income from the tax rate schedules, not the tax tables. Tax table results are produced only when Program "R6" is called as a subroutine from Program "P2".

To execute the programs standing alone:

1) Place the amount of taxable income in the $X$ register.
2) [XEQ] "R6", "R7", or "R8"
3) If the program is executed standing alone, it will, unless Flag 03 has been set, prompt for a status input. If Flag 03 is set and this prompt is suppressed, you must be sure that the proper status code has been stored in register 08. As with other input values, the status code, once entered, will remain unchanged until you enter a new one.

After execution, the amount of tax is in the $X$ register and appears in the display with the label "TX86=", "TX87=", or "TX88=". The amount of taxable income has been stored in Register 02, and the amount of tax has been stored in R03.

The printer, if used, will record taxable income, status, and tax.

## Examples:

Load Programs "K" and "Rb".
SIZE to at least 009.
Clear Flags 00 through 04.
[FIX] 0.

| Display | Action required |  | Comments |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { STATUS: } 2 . \\ & \text { TX86= } 3,059 . \end{aligned}$ | 23,456 | [XEQ] "R6" | Enter taxable income; start program. |
|  |  | [ $R / S$ ] | Enter status 2. |
|  |  |  | 1986 Tax for status 2. |
|  | [RCL] 02 | [ $R / S]$ | Recall taxable income; start program. |
| STATUS: 2. TX86 $=3,946$. | 1 | [R/S] | Enter status 1. <br> Amt of tax for status 1. |
|  | Load Prog 23,456 | $\begin{aligned} & \text { •am "R7". } \\ & \text { [XEQ] "R7" } \end{aligned}$ | Enter taxable income; start program. |
| $\begin{aligned} & \text { STATUS: } 1 . \\ & \text { TX87= } 3,398 . \end{aligned}$ | 2 | [R/S] | Enter status 2. 1987 Tax for status 2. |
|  | [RCL] 02 | [R/S] | Recall taxable income; start program. |
| $\begin{aligned} & \text { STATUS: } 2 . \\ & \text { TX87= } 4,312 . \end{aligned}$ | 1 | [R/S] | Enter status 1. <br> Amt of tax for status 1. |
|  | $\begin{aligned} & \text { Load Progi } \\ & 23,456 \end{aligned}$ | $\begin{aligned} & \text {-am "R8". } \\ & \text { [XEQ] "R8" } \end{aligned}$ | Enter taxable income; start program. |
| $\begin{aligned} & \text { STATUS: } 1 . \\ & \text { TX88= } 3,518 . \end{aligned}$ | 2 | [R/S] | Enter status 2. |
|  |  |  | 1988 Tax for status 2. |
|  | [RCL] 02 | [R/S] | Recall taxable income; start program. |
| STATUS: 2.$T \times 88=4,247 .$ | 1 | [ $R / S]$ | Enter status 1. |
|  |  |  | Amt of tax for status 1. |

Program " FT "
Federal Tax ©Form 1040, Fage 1 )
Other programs needed: "K"
This program steps through Fage 1 of Form 1040 , displaying many of the more commonly used line items. Where the user needs line items not displayed in the program, he may use other line items diplayed but not needed.

You may aduance through the program by:

1) Keying in data and pressing [R/S] where a change in input data is desired, or
2) pressing [R/S] to advance through the program without data changes.

## Sequence of displays during program execution

FORM 1040 Title prompt ideritifying the program.
STATUS: Filing status code checked on Form 1040.

| Code | Filing Status |
| :--- | :--- |
|  | Single |
| 2 | Married, filing jointly |
| 3 | Married, filing separately |
| 4 | Head of Household |
| 5 | Qualifying widow(er) |

Note: If the status register (R08) does not contain a value from 1 to 5 , the program initializes it at 2.

EXMP\# Number of exemptions claimed on form 1040.
WAGES: Tatal wages received.
INT:
DIVS:
EXCLSN:
NETDIV=
Total taxable interst income.
Total taxable dividends received.
Exclusion for dividends received.
Dividends less exclusion.
ST RF: State income tax refund received (include only if taxpayer itemized deductions for previous tax year).
SCH C: Schedule $C$ income (income from business or profession).
SCH D: Schedule D income (capital gain or loss). Note: If Program "DD" had been used to compute Schedule D in come, Schedule D income will have been stored in Register 16 for use by this pragram.

SCH E: Schedule E income (rents, royalties, partneship income, etc.).
OTHINC: Other income. (All income items not previously entered.)

TOTINC=
Gross income.

```
IRA: Contributions to an IRA or Keogh plan.
SCH W: Married Couple Deduction ifrom Schedule W).
OTHADJ: Other adjustments to gross income.
TOTADJ= Total adjustments to income.
AGI= #Adjusted Gross Income.
# indicates an output display not suppressed by setting Flag 04.
If Program "P2" is present, execution of that program is called as a continua-
tion af the Form 1040 program. If "P2" is not present, this pragram is re-
started.
Example: Load Programs "K" and "FT". SI2E to at least 023.
    Clear Flags 00 through 04. [FIX] 0.
    [XEQ] "FT". Enter input values as shown.
```

FORH 1048
8. STATUS: 2.
9. EXMP\#: 4.
10. HRGES: 38:456.
11. INT: 428.
12. DIVS: 745.
13. EXCLSN: 290.

NETDIY: 545,
14. ST RF: 254.
15. SCH C: 8.
16. SCH D: 1,392.
17. 5CH E: 8.633 .
18. OTHINC: 285. TOTINC $=49,993$.
19. IRA: 2,800.
20. SCH H: 348. 21. OTHADJ: 8. TOTAD. $=2,348$.

AGI $=47.645$.

```
Program "P2"
Page 2, Form }104
```

Other programs needed: "K" "RG"
Optional subprograms: "SA" "SG" "AT"
This program is a continuation of Form 1040, and begins at the top of Page 2 of that form. The two programs will run as a unit, but their separability lets you start at the top of Page 2 of the form, whether or not you are using Program "FT" for page 1.

This program may be executed with or without optional subprograms.

```
Setting Flag 00 directs execution of "SA" (itemized deductions).
Setting Flag 01 directs execution of "SG" (income averaging).
Setting Flag 02 directs execution of "AT" (alternative minimum tax).
```


## Sequence of displays during program execution.

1) When execution begins with this program, it begins here:

1040 P2 Title prompt identifying the program.
STATUS: Filing status from Page 1, Form 1040.
EXMP\#: Number of exemptions.
AGI: Adjusted Gross Income.
Note: These items are ordinarily provided by execution of Program "FT". Because they are needed, however, for this program, they are shown as input lines when program execution is initiated with this program.
2) If program execution is continuing from Program "FT", execution of this program begins here:

DEDS: Net Itemized Deductions.
Note: If Flag 00 is set, Program "SA" (itemized deductions) will automatically be called and executed to compute itemized deductions. On completetion of subprogram execution, execution of this program will automatically continue. If the subprogram is not executed, the value of this item may be entered as a single figure as are other input data.
$: \quad$ Line 35, Form 1040. Adjusted Gross Income ts Net Deductions.
ExPes= Number of exemptions $\times \$ 1,080$.
TXABL= \#Taxable income.
Note: This amount of taxable income is automatically adjusted, when necessary, to the center of the bracket used in the tax table. The adjusted amount is not displayed, but is used for calculation to produce the amount of tax from the tax table. The unadjusted amount is stored in Register 02 for use by other programs.


Program "SA"
Schedule A (Itemized Deductions)
Other programs needed: "K"
This program can be executed as a subprogram of Program "P2" or as a stand-alone program.

This program steps through Schedule $A$ to calculate the amount of itemized deductions to be entered on Line 34 a of Form 1040.

If Flag 00 is set, this program is automatically called and executed when program P2" is ruri.

## Sequence of displays during program execution.

SCHED A Title prompt identifying the program.

1) When execution begins with this program, it includes the following items:
STATUS: Filing status from Page 1, Form 1040.

AGI: Adjusted Gross Income.
Note: These items are ordinarily provided by execution of Program "FT". Because they are needed, however, for this program, they are shown as input items when program execution is initiated with this program.
2) If program execution is continuing from Program "P2", execution of this program continues here immediately after the title prompt:

DRGS: Amt spent for medicines and drugs.
DCTRS: Amt spent for doctors, dentists, nurses, hospitals, insurance premiums, etc.
TRNSP: Amt spent for medical transportation.
OTHMED: Other medical expenses, including eyeglasses, etc.
TOTMED $=\quad$ Total medical expenses.
$5 \%$ AGI $=\quad 5 \%$ of Adjusted Gross Income.
NETMED= Net deduction for medical expenses. Stored in R47 for use in Program "AT".

NOTE: You may begin execution of this program by executing "AB". In that case, execution of the program begins here and includes the following two prompts:

SCH A BTM Title prompt (Schedule A, Bottom half).
NETMED $=$
Net deduction for medical expenses.
ST TX: State and local income tax paid during the tax year.
RE TX:
SLS TX:
OTHTXS:
TOTTXS=
Real Extate Tax.
Sales tax, includirg sales tax on motor vehicles.
Other taxes, including property tax.
Total deduction for taxes.

MORTG:
CRDT CD: OTHINT: TOTINT:

CONTRB: Total contributions.
CSLTY: Total casualty losses.
DUES: Union and professional dues.
TX PREP:
OTHMSC:
TOTMSC=

TOTDED $=$ Gross amount of deductions.
$2 B A=$

NETDED= and individuals.

Other interest paid.
Total deduction for interest.

TOTMSC = Total miscellaneous deductions.

Zero Bracket Amount.
\#Net amount of deductions.

Interest paid on home mortgage, including financial institutions
Interest paid on credit cards and charge accounts.

Note: The difference tetween total interest paid and home mortgage interest paid is stored in R46 for Program "AT". Stored in Register 22 for use in Program "P2".

## Example:

Load Programs "K" and "SA"
SIZE to at least 049.
Clear Flags 00 through 04.
[FIX] 0 .

SCHED A
8. STATUS: 2,
6. AGI: 47,645.
31. DRGS: 512.
32. ICTRS: 1,864. 33. TRNSP: 85.
34. OTHMED: 264. TOTMEI $=2,725$.
$5 \% \mathrm{AGI}=2,382$.
NETHEI= 343.
35. ST TX: 1,373.
36. RE TY: 833.
37. SLS TX: 325.
38. OTHTXS: 9. TOTTXS $=2,531$.
39. HORTS: 2,377,
40. CRDTCD: 62.
41. OTHINT: 130.

TOTINT $=2,569$.
42. CÜNTRE: 560. 43. ESLTY: 0.
44. TUES: 159 .
45. TXPREF: $4 \overline{4}$.
46. 0 THMSC: 44 . TOTHSC= 234 .

TOTDEII $=6,237$. $Z B A=3,670$. NETDED $=2,567$.

Program "DD"
Schedule D (Capital Gains and Losses)
0ther programs needed: "K"
This program calculates:
the taxpayer's $60 \%$ capital gains deduction ( $60 \%$ CGD)
the amount of capital gain or loss to be reported on form 1040
the amount or short-term carryover, if any
the amount of long-term carryover, if any
This program is executed automatically by Program "TX" or it may be executed as a stand-alone program.

CAUTION: This program assumes that adjusted taxable income is at least $\$ 3,000$


Sequence of displays during program execution:

| SCHED D | Title prompt identifying the program. |
| :---: | :---: |
| STATUS: | Filing status from Page 1, Form 1040. <br> Note: this item is ordinarily provided by execution of Program "FT". Because it is needed, however, for this program, it is shown as an input item when this program is executed. |
| SHORT: | Net Short-Term Gain or (loss). Line 8. |
| LONG: | Net Long-Term Gain or (loss). Line 17. |
| $18=$ | Line 20. Lines 8 \& 17 combired. |
| $19=$ | Line 19. See Schedule D. |
| 60\%CGD= | \#Capital Gain Deduction. Line 20. ( $60 \%$ of amt on Line 19.) <br> This amount is stored in R49 for use with Program "AT". |
| GAIN= | \#Line 21. Capital Gain to be reported on Form 1040. Stored in Register 16 for use by Program "FT". |
| 22= | Line 22. See Schedule D. |
| L05S= | \#Line 23. Capital Loss to be reported on Form 1040. Stored in Register 16 for use by Program "FT". |
| $24=$ | Line 24. Loss, if any, shown on Line 8. |
| $25=$ | Line 25. Gain, if any, shown on Line 17. |
| $26=$ | Line 26. Line 24 less Line 25. |
| 27= | Line 27. Smaller of lines $23: 26$. |
| SHRTCO $=$ | \#Short-term capital loss carryover. Line 28. |
| $29=$ | Line 29. Amt on Line 23 reduced by the amt, if any, on Line 27. |
| $30=$ | Line 30. Loss, if any, shown on Line 17. |
| $31=$ | Line 31. Gain, if any, shown on Line 8. |
| 32= | Line 32. Line 30 less Line 31. |
| $33=$ | Line 33. Line $29 \times 2$. |
| LONGCO= | \#Long-term capital loss carryover. Line 34. |

Note: Many of the displays in this program are alternative, and will not appear if they are not required. For example, Lines 19-21 are used if there is a net gain, while lines $22 \& 23$ are used if there is a net loss. Similarly, none of the lines relating to loss carryovers are displayed if there is a net gain or if the entire net loss can be reported on Form 1040.

Examples:
Load Programs "K" and "DD".
SI2E to at least 052.
Clear Flags 00 through 04.
[FIX] 0.
[XEQ] "DD".
Use input values as shown.


## EXAMPLE 2

EXAMPLE 3

SCHED D
8. STATUS: 2.
50. SHORT: 238.
51. LONG: -8.700.

$$
18=-8,462 .
$$

$$
22=-4,231 .
$$

$$
L 055=-3,880 .
$$

$24=0$. SHRTCO $=0$.
$29=-3.895$. $30=-8,700$.
$31=238$. $32=-8,462$. $33=-6,880$.
LNGCO $=-2,462$.

Program "sG"
Schedule G (Income Averaging)
Other programs needed: "K" and "R6"
This program determines whether the taxpayer is eligible to compute his tax by the income averaging method, and, if so, computes it on that basis, compares it to the tax computed without averaging, and selects the lower af the two.

If Flag 01 is set, this program will be automatically called as a subprogram by Program "P2". It can also be executed as a stand-alone program. In the latter case, it should be executed after the execution of Program "Ro", which will provide the following data needed for proper execution of this program.

```
in R02: Taxable income
in R03: Tax (from tax rate schedules) on taxable income.
in R08: Status code
```

CAUTION: This program aseumes that the amount on Lines 4 , 9 , and 11 is zero. Sequence of displays during program execution:

SCHED $6 \quad$ Title prompt identifying the program.
B3INC: Taxable income from 1983 tax return, Line 37.
84INC: Taxable income from 1984 tax return, Line 37.
85INC: Taxable income from 1985 tax return, Lirie 37.
TOTAL= Total of taxable incomes from the three base years. Line 5 .
L6=
Amt to be entered on Line 6 (1/3 of Line 5).
G7= \#Amt to be entered on Line 7 (1.4 $\times$ Line 6).
NOTE: You may begin execution of this program at Line 7 by executing "GB". In that case, execution of the program begins here:

SCH G BTM Title prompt. (Schedule G, Bottom half)
G7: Amount on Line 7, Schedule 6.
L14= Line 14. Averagable income.
NG \#"NO GOOD." This display signifies that the amount of averagable income is too small to permit the use of income averaging. Press [R/S] to continue. This display does not appear if taxpayer qualifies for income averaging.

L15= Line 15. 25\% of Line 14.
Note: The program does not display an amount for Line 16. Line 16 is the same as Line 7.

```
17,19= Lines 17& 19. Total of Lines 15& & %.
20,21= Lines 20& 21. Tax on amt on Lines 17% & 19.
L22= Line 22. Tax on amt on Line 16.
L23= Line 23. Line 21 less Line 22.
L24= Line 24. Line 23 x 3.
SG TX= #Tax determined by income averaging.
LO TX= #Lower of:
a) tax without averaging, and
b) tax computed by averaging.
```

To use as a stand-alone program with tax rate schedule Program "R6":

1) Place the amount of 1986 taxable income in the $X$ register.
2) [XEQ] "R6".
3) [XEQ] "SG".

Program "GQ"
Schedule G (Income Averaging) "Quick" version
Other programs needed: "K" and "R6"
Optional subprograms: None.
This program operates like Program "SG" (when started at label "GB") except for the omission of displays to make it run more quickly. Refer to the instructions for Program "SG". It differs from Program "SG" in that:

1) it has no title prompt
2) the output displays for Lines 14 through 24 are omitted.
3) it needs only 9 data regs.
4) it is not subject to automatic call from Prgm "P2".

## Example:

```
Load Programs "K", "R6", and "SG".
SI2E to at least 055 (SG), or
SIZE to at least 009 (GQ).
Clear Flags 00 through 03.
Set Flag 04.
[FIX] 0.
Place 40758 in X.
[XEQ] "R6".
Use STATUS: 2.
"TX86=7,685."
[XEQ] "SG" or "GQ".
Use 26,853 for G7.
```

TXABL $=40,758$. 8. STATUS: 2. TX86=7,685. SCHED G
52. 83INC: $14,335$.
53. 84INC: 26,510 .
54. 85INC: $16,698$. TOTAL $=57,543$. $\mathrm{L} 6=19,181$. $G 7=26,853$.
$L 14=13,985$.
LI5 = 3,476.
$17,19=30,329$. $20,21=4,684$.
$L_{22}=3,815$.
L23= 869 .
L24 $=2,607$. $S G T X=7,291$.

L0 TX=7.291.

Program "AT"
Computation of Alternative Minimum Tax (Form 6251)

Other programs needed: "K"
This program is executed as a subprogram of Program "P2" or as a stand-alone program. The following data from other programs is needed:

```
in R06: Adjusted Gross Income
in R08: Filing status code
in R13: Dividends received exclusion
in R30: Amt on Line 49, Form 1040 {FT49): net tax after credits
in R39: Mortgage interest paid
in R42: Total contributions from Schedule A
in R43: Casualty and theft loss from Schedule A
in R47: Net medical deductions
in R48: Interest expense other than mortgage interest
in R49: 60% capital Gain Deduction (from Schedule D)
```


## Sequence of displays during execution:

ALT MIN TAX Title prompt identifying the program.

1) When execution begins with this program, it includes the following item:

STATUS: Filing status from page i, Form 1040.
2) If program execution is continuing from Program "P2", execution of this program continues immediately after the title prompt:

AGI= Adjusted Gross Income
MEDEXP: Net medical deduction from Schedule A.
5\%AGI= 5\% af Adjusted Gross Income.
NET $=$ Excess of net medical expenses over $5 \%$ of AGI.
CONTRB: Total contributions from Schedule A.
CSLTY: Total casualty and theft loss from Schedule A.
MORTG:
OTHINT
NETINV Interest expense on principal residence from Schedule A. Other interest expense from Schedule A.
Net investment income.
Lower of other interest expense and net investment income.
Other deductions from Schedule $A$ that may be subtracted from
AGI Sgambling losses and estate tax included on Schedule A.)
Total deductions from Schedule A to be subtracted from AGI.

Adjusted Gross Income less total deductions.
Dividend exclusion from Form 1040.
$60 \%$ Capital Gain Deduction from Schedule D.
Total of other preferences that must be added to AGI. These include accelerated depreciation, depletion, drilling costs, etc. Please refer to Form 6251, Lines 4c through $4 k$.
TOTPRF=

```
AMTI= Alternative minimum taxable income.
EXMP= Exemption allowed for alternative minimum tax:
    $40,000 for filing status 2 or 5;
        30,000 for filing status 1 or 4;
        20,000 for filing status 3.
NET= AMTI less exemption amount.
20%
FT49:
NET=
FTC:
AM TX=
Foreign Tax Credit.
Alternative Minimum Tax.
    Stored in Register 26
    for use in Program "P2".
```


## Example:

Load Programs "K" and "AT". SIZE to at least 061.
Clear Flags 00 through 04. [FIX] 0 .
[XEQ] "AT".
Use input values as shown.

ALT MIN TAX
8. STATUS: 2. 6. AGI: 47,645.
47. MEDEXP: 343.
$5 / \mathrm{AGI}=2,382$.
$\mathrm{NET}=\mathrm{B}_{\mathrm{B}}$.
42. CONTRE: 560.
43. CSLTY: 8.
39. MORTG: $2,377$.
48. OTHINT: 192.
55. NETINY: $2,346$.

LOMER= 192.
56. DTHDED: 0.

TOTDED $=3,129$.
$L 3=44,516$.
13. XCLSN: 206.
49. 607CGI: 2,088,
57. OTHPRF: $2,250$.

TOTPRF $=4,538$.

AMTI $=49,054$.
$E X M P=40,800$.
NET $=9,854$.
$20 \%=1,811$,
30. FT49: 7,567. NET $=\theta$. 58. FTC: 日. $^{\text {. }}$ AM $T X=0$.

Program "Whlu"
Schedule $W$ (Deduction for Married Couple when Both Work)
Other programs needed: "K"
This program calculates the deduction for a married couple when both work.
This program is executed automatically by Frogram "TX" and it may be executed as a stand-alone program.

Sequence of displays during program execution:

| SCHED W | Title prompt identifying the program. |
| :---: | :---: |
| WAGESa: | Wages, tips, etc., taxpayer a. |
| BFTa: | Business, farm, and partnership income, taxpayer a. |
| TOTAL= | Total of the previous two items. |
| ADJa: | Adjustments (IRA or Keogh payments, etc.) applicable to the previous items. |
| NET $=$ | Total less adjustments. Line 5a. |
| WAGESb: | Wages, tips, etc., taxpayer b. |
| BFTb: | Business, farm, and partnership income, taxpayer b. |
| TOTAL= | Total of the previous two items. |
| ADJt: | Adjustments (IRA or Keogh payments, etc.) applicable to the previous items. |
| NET= | Tatal less adjustments. Line 5b. |
| L6= | Line 6. The lower of Line 5a, 5b, and $\$ 30,000$. |
| DED $=$ | \#Married couple deduction. $10 \%$ of Line 6 . Stored in R20 for use in Program "FT". |
| NOTE: | gregate wages of both taxpayers red in R10 for use in Program "FT". |

## Example:

Load Programs "K" and "WW". SIZE to at least 065.
Clear Flags 00 through 04.
[FIX] 0.
SCHED W
59. UAGESa: 34,976 .
60. $\mathrm{BFTa}: 2,433$.

TOTAL $=37,469$.
61. ADJa: 2,000.

NET $=35,499$.
62. HAGESb: 3,480.
63. BFTb: 日,

TOTAL $=3,480$.
64. AD.Jb: 0 . NET $=3,488$.
$\mathrm{L} 6=3,480$.
DED $=348$.

```
Program "EE"
Schedule SE (Self-Employment Tax)
Other programs needed: "K"
    This program computes self-employment tax.
    This program is executed only as a stand-alone program.
CAUTION: This program does not compute self-employment tax by the optional
method, either farm or non-farm (limes 3-6).
```


## Sequence of displays during program execution:

```
SCHED SE Title prompt identifying the program.
SE INC: Total self-employment income. Lines 1 \& 2 .
SS WGS: Total social security wages & unreported tips. Lines 11a & 11b.
L9= Amount to be entered on line 9.
        \If less than $400, self-employment tax is zero and
        the program omits all of the following displays
                except the final one.)
Llic= Amount to be entered on Line lic.
L12a= 37,800 less line 11c.
L13= Lower of Line 9& Line 12a.
SE TX= #Self-employment tax (12.3% of Line 13).
    Stored in R25 for use in Program "P2".
```


## Example:

Load Programs "K", and "EE".
SIZE to at least 067.
Clear Flags 00 through 04.
[FIX] 0.
[XEQ] "EE".
Use input values as shown.

## SCHED SE

65. SE INC: 2,824
66. SS HGS: 34,976 .
$L 9=2,824$.
LIIC $=34,976$.
$L 12 a=7,824$.
$L 13=2,824$.
SE TX=347.

Program "K"
Common subroutines
This program cannot be executed alone; it is used only in connection with the other programs. It contains subroutines used by the other programs and must be present during their execution.

```
The subroutines in this program are:
"K" Used for the input of an "OTHER" i tem and the output of the "TOTAL".
"L" Locates in main memory or loads from extended memory or cassette
        programs called by other programs. If the program called is found or
        loaded successfully, execution automatically continues with that pro-
        gram. If program called cannot be found or loaded, program execution
        halts and a "NONEXISTENT" message is displayed.
"LP" Same as "L" except executed manually. Calculator will prompt "PRGM?"
    and the user should respond by keying in the name of the desired
    program and pressing [R/S].
"N" Used for "NET" qutput; subtracts one quantity from another, replaces
    a negative difference with zero and outputs "NET".
"P" Used to initialize the other programs. It prints the title of the
    program if a printer is being used, and stores the initializingreg-
    ister counter for the program in the index register 07.
"Q" Used for the imput of Adjusted Gross Income.
"S" Used for the input of taxpayer's filing status code.
"X" Input subroutine. It increments the register index in R07 and dis-
        plays an alpha label for the item and the value currently in the cor-
        responding data register. If a printer is being used, the number of
        the data register is printed in front of the label. After the prompt,
        this subroutine stores the X-register value in the data register after
        the prompt, and tests for a change from the original. If new data has
        been entered and a printer is being used, the new value will be
        printed. These displays may be suppressed by setting Flag 03.
"Y" Qutput subroutine. It displays the item name and an amount cal-
        culated or called from a data register and needed for calculation.
        These displays do not call for data entry by the user. They may be
        suppressed by setting Flag 04.
"U" Used in the same way as subroutine "Y" except that these output dis-
        plays are not suppressed by setting Flag 04.
"z" Computes the taxpayer's Zero Bracket Amount.
```


## Loading Bar Code:

1) Don't forget that the HP-41 wand can read rows of bar code either left-toright or right-to-left. If the wand isn't reading a row one way, try the other.
2) If a bar code row is particularly stubborn and can't be read, remember that you can bypass a row of bar code (even Row 1) by pressing [SST] and moving the wand to the next row. When you have finished reading in the rest of the rows with the wand, key in the missing instructions by referring to the program listing.
3) Fresh batteries in you HP-41 may help avoid bar code reading problems.

## Some "quick-hitters":

1) Tax-on-taxable income, one-key operation.

Make sure that the correct filing status code is stored in R08. Then set Flag 03 and you can get tax on taxable income by placing the taxable amount in $X$ and pressing the key assigned to Program "R6" (or "R7" or "R8").
2) Income averaging, two-key operation.

Again, make sure that the correct filing status is stored in R08. Store the amount on Line 7, Schedule 6 in R04. ¿You may use the calculator to compute this amount using Program "SG", but it won't change once determined because it is derived from information relating to previous tax years. Changes in the current year's tax information will not affect it.) Set Flag 03. Put 1986 taxable income in $X$ and [XEQ] "R6". Then [XEQ] "GQ". As information becomes more complete and this year's taxable income amount is refined, new income averaging results can be obtained by using two adjacent keys, "Rb" and "GQ".

## Quick reference quide:

Pages 7, 8, \& 9 make a good quick reference guide to the programs.
The register index on pages 8 \& 9 enables you to store values in appropriate registers without having to step through the program. This is paticularly helpful when you have only a few to store or change. You can then set Flag 03 and run through the programs at a faster pace.

Page 7 has information about the programs useful for deciding what to load into the calculator's main memory and extended memory, if you have it. Do not overlook the notes at the bottom of page 7 , as they contain important information on this point.

## "ALPHA DATA" error message:

When running the programs, you may get an "ALPHA DATA" error message. This usually means that the program is trying to round off data recalled from a register containing alpha data placed there by some other program. When this happens, [XEQ] [CLX] and [DISP] 07 to find the number of the offending register. Store a zero in the identified register and try again.




| Please <br> Sign <br> Here | Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Your signature | Date | Your occupation |  |
|  |  |  |  |  |
|  | Spouse's signature (fif joint return, BOTH must sign) | Date | Spouse's occupation |  |
| Paid <br> Preparer's <br> Use Only |  | Date |  | Preparer's social security no. |
|  | signature |  | Check if self-employed | - |
|  | $\begin{aligned} & \begin{array}{l} \text { Firm's name (or } \\ \text { youss ifs self.employed) } \\ \text { and address } \end{array} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { E.I. No. } \\ & \text { ZIP code } \\ & \hline \end{aligned}$ |  |
|  |  |  |  |  |  |


| SCHEDULES A\&B |
| :--- |
| (Form 1040) |
| Department of the Treasury |
| Internal Revenue Service |

Schedule A-Itemized Deductions

## (Schedule B is on back)

$\rightarrow$ Attach to Form 1040. See Instructions for Schedules A and B (Form 1040).

OMB No. 1545-0074
1986
Attachment Sequence No. 07

Your social security number

## Medical and

 Dental Expenses(Do not include expenses reimbursed or paid by others.)
(See
Instruc-
tions on
page 19.) 5
Taxes You
Paid

Paid
(See
Instruc
Instruc-
tions on page 20.)
Interest You
Paid

## (See

Instruc-
tions on
page 20.)
1 Prescription medicines and drugs; and insulin
2 a Doctors, dentists, nurses, hospitals, insurance premiums you paid for medical and dental care, etc.
b Transportation and lodging
c Other (list-include hearing aids, dentures, eyeglasses, etc.)
$\qquad$
Add lines 1 through $2 c$, and enter the total here
4 Multiply the amount on Form 1040, line 33, by $5 \%$ (.05)
5 Subtract line 4 from line 3. If zero or less, enter - 0 - Total medi
6 State and local income taxes
7 Real estate taxes
8 a General sales tax (see sales tax tables in instruction booklet)
b General sales tax on motor vehicles.
9 Other taxes (list-include personal property taxes)
10 Add the amounts on lines 6 through 9 . Enter the total here.
11 a Home mortgage interest paid to financial institutions (report deductible points on line 13)
b Home mortgage interest you paid to individuals (show that person's name and address)

12 Total credit card and charge account interest you paid
13 Other interest you paid (list payee's name and amount)
$\qquad$
$\qquad$
14 Add the amounts on lines 11 through 13. Enter the total

14 Add the amounts on lines 11a through 13. Enter the total here
Contributions
You Made

## (See

See
Instruc.
tions on
tions on
page 21 .)
organization, report those contributions on line 15b.) . . . organization. (Show to whom you gave and how much you gave.)

16 Other than cash. (You must attach Form 8283 if over $\$ 500$.).
17 Carryover from prior year
18 Add the amounts on lines 15 a through 17. Enter the total here. Total contributions
Casualty and
Theft Losses
Miscellaneous
Deductions
(See
Instruc-
tions on
page 22.)
Summary of
Itemized

Deductions
(See
Instruc-
tions on
page 22.)
19 Total casualty or theft loss(es). (You must attach Form 4684 or similar statement.)
20 Union and professional dues
21 Tax return preparation fee
22 Other (list type and amount)
$\qquad$

23 Add the amounts on lines 20 through 22 . Enter the total here. Total miscellaneous
24 Add the amounts on lines $5,10,14,18,19$, and 23. Enter your answer here.
25 If you checked Form 1040
$\left\{\begin{array}{l}\text { Filing Status box } 2 \text { or } 5, \text { enter } \$ 3,670 \\ \text { Filing Status box } 1 \text { or } 4, \text { enter } \$ 2,480 \\ \text { Filing Status box } 3, \text { enter } \$ 1,835\end{array}\right\}$
26 Subtract line 25 from line 24. Enter your answer here and on Form 1040, line 34a. (If line 25 is more than line 24 , see the Instructions for line 26 on page 22.)


Part IV Computation of Post-1969 Capital Loss Carryovers From 1986 to 1987 (Complete this part if the loss on line 22 is more than the loss on line 23)

24 Enter loss shown on line 8; if none, enter zero and skip lines 25 through 28, then go to line 29.
25 Enter gain shown on line 17. If that line is blank or shows a loss, enter zero
26 Subtract line 25 from line 24.
27 Enter smaller of line 23 or line 26
28 Subtract line 27 from line 26. This is your short-term capital loss carryover from 1986 to 1987
29 Subtract line 27 from line 23. (Note: If you skipped lines 25 through 28, enter amount from line 23.)
30 Enter loss from line 17; if none, enter zero and skip lines 31 through 34
31 Enter gain shown on line 8. If that line is blank or shows a loss, enter zero
32 Subtract line 31 from line 30.
33 Multiply amount on line 29 by 2.
34 Subtract line 33 from line 32. This is your long-term capital loss carryover from 1986 to 1987

|  |  |  |
| :--- | :--- | :--- |
| 24 |  |  |
| 25 |  |  |
| 26 |  |  |
| 27 |  |  |
| 28 |  |  |
| 29 |  |  |
| 30 |  |  |
| 31 |  |  |
| 32 |  |  |
| 33 |  |  |
| 34 |  |  |

## Part V Complete This Part Only if You Elect Out of the Installment Method and

 Report a Note or Other Obligation at Less Than Full Face ValueCheck here if you elect out of the installment method
Enter the face amount of the note or other obligation.
$D$
Enter the percentage of valuation of the note or other obligation.
Part VI Reconciliation of Forms 1099-B For Bartering Transactions
Complete this part if you received one or more Form(s) 1099-B or an equivalent substitute statement(s) reporting bartering income. Enter the amount on the line that indicates the form or schedule you used to report the bartering income.

## 35 Form 1040, line 22

36 Schedule C (Form 1040)
37 Schedule D (Form 1040)
38 Schedule E (Form 1040)
39 Schedule F (Form 1040)
40 Other (identify) (if not taxable, indicate reason—attach additional sheets if necessary)

41 Total (add lines 35 through 40)
Amount of bartering from
Form 1099-B or equivalent statement


Note: The amount on line 41 should be the same as the total bartering on all Forms 1099-B or equivalent statements received.


## Step 2 Figure your averageable income

6 Divide the amount on line 5 by three (3)
7 Multiply the amount on line 6 by 140\% (1.4)
8 Enter your taxable income for 1986 from Form 1040, line 37
9 If you received a premature or excessive distribution subject to a penalty under section 72 , see instructions

10 Subtract line 9 from line 8 .
11 If you live in a community property state and are filing a separate return, see instructions .
12 Subtract line 11 from line 10. If less than zero, enter zero
13 Enter the amount from line 7 above
14 Subtract line 13 from line 12. This is your averageable income. If this line is $\$ 3,000$ or less, do not complete the rest of this form

| 6 | 19,181 |  |
| :--- | :--- | :--- |
| 7 | 26,853 |  |
| 8 | 40,758 |  |
| 9 |  |  |
| 10 | 40,758 |  |
| 11 |  |  |
| 12 | 40,758 |  |
| 13 | 26,853 |  |
| 14 | 13,905 |  |

## Step 3 Figure your tax



| 15 | 3,476 |  |
| :---: | :---: | :---: |
| 16 | 26,853 |  |
| 17 | 30,329 |  |
| 18 |  |  |
| 19 | 30,329 |  |
| 20 | 4,684 |  |
|  |  |  |
| 24 | 2,607 |  |
| $27$ |  |  |
| 28 | 7,291 |  |

Alternative Minimum Tax Computation
Department of the Treasury
Attach to Forms 1040, 1040NR, 1041 or 990-T (Trust).

Internal Revenue Service
Name(s) as shown on tax return
Identifying number


## Instructions

(Section references are to the Internal Revenue Code)
Paperwork Reduction Act Notice. - We ask for this information to carry out the Internal Revenue laws of the United States. We need it to ensure that taxpayers are complying with these laws and to allow us to figure and collect the right amount of tax. You are required to give us this information. Who Must File.-File this form if : (a) You are liable for the alternative minimum tax; or (b) you have one or more tax preference items on lines 4 c through 4 k ; or (c) your adjusted gross income is more than line 6 and you have an amount on line $2 e(3)$, and line $2 e(2)$ includes income other than interest and dividend income.

Individuals, estates or trusts may be liable if
their adjusted gross income plus tax preference
items listed on line 4 total more than line 6.

For more information, see Publication 909, Alternative Minimum Tax.
Minimum Tax Deferred From Earlier
Year(s). - If a net operating loss carryover from an earlier year(s) reduces taxable income for 1986 and the net operating loss giving rise to the carryover resulted in the deferral of minimum tax in that earlier year(s), all or part of the deferred minimum tax may be includible as tax liability for 1986. Figure the deferred minimum tax in the worksheet in Publication 909 and enter it on Form 1040, line 51, or Form 1041, line 31. Write "Deferred Minimum Tax."
Partners, Beneficiaries, etc.-If you are a: (1) Partner or shareholder of an S corporation, take into account separately your distributive share of items of income and deductions that enter into the computation of tax preference items.
(2) Beneficiary of an estate or trust, see section

58(c) and the line 4(1) instructions.
(3) Participant in a common trust fund, see section 58(e).
(4) Shareholder or holder of beneficial interest in a regulated investment company or a real estate investment trust, see section 58(f).
Carryback and Carryover of Unused Credits. It may be necessary to figure the carryback or carryover of certain unused credits. See section 55(c)(3).
Note: If you have an earned income credit, you must reduce that credit by any alternative minimum tax.
Line-by-Line Instructions
Line 1, Estates and Trusts.—Adjusted gross income is figured in the same way as for an

Schedule W
Deduction for a Married Couple
(Form 1040)
Department of the Treasury When Both Work

Internal Revenue Service

- For Paperwork Reduction Act Notice, see Form 1040 Instructions.

Attachment
Sequence No. 20
Names as shown on Form 1040

- Attach to Form 1040.

Nat
Your social security number

## Step 1 Figure your earned income

|  | (a) You |  |  | (b) Your spouse |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Wages, salaries, tips, etc., from Form 1040, line 7. (Do not include pensions or annuities reported on Form 1040, line 16 or lines 17a and 17b.) | 1 | 34 | 976 | 1 |  | 480 |  |
| 2 Net profit or (loss) from self-employment (from Schedules C and F (Form 1040), Schedule K-1 (Form 1065), and any other earned income) | 2 | 2 | 433 | 2 |  |  |  |
| 3 Add lines 1 and 2. This is your total earned income | 3 | 37 | 409 | 3 | 3 | 480 |  |

## Step 2 Figure your qualified earned income

4 Add amounts entered on Form 1040, lines 25, 26, 27, and any repayment of supplemental unemployment benefits (sub-pay) included on line 31. Enter the total (see instructions below)
5 Subtract line 4 from line 3. This is your qualified earned income. If the amount in column (a) or (b) is zero ( $-0-$ ) or less, stop here. You may not take this deduction

| 4 | 2 | 000 |  | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
| 5 | 35 | 409 |  | 5 | 3480 |  |  |

## Step 3 Figure your deduction

6 Compare the amounts in columns (a) and (b) of line 5 above. Enter the smaller amount here. (Enter either amount if 5(a) and 5(b) are the same.) Do not enter more than $\$ 30,000$

7 Percentage used to figure the deduction (10\%)

| 6 | 3480 |  |
| :--- | :--- | :--- |
| 7 | $\times 10$ |  |
| 7 | 8 | 348 |

## Instructions

Complete this schedule and attach it to your Form 1040 if you take the deduction for a married couple when both work. You may take the deduction if both you and your spouse:

- work and have qualified earned income, and
- file a joint return, and
- do not file Form 2555 to exclude income or to exclude or deduct certain housing costs, and
- do not file Form 4563 to exclude income.
There are three steps to follow in figuring the deduction on Schedule W.
Step 1 (lines 1, 2, and 3). -Figure earned income separately for yourself and your spouse.
Earned income.-This is generally income you receive for services you provide. It includes wages, salaries, tips, commissions, sub-pay, etc. (from Form 1040, line 7). It also includes income earned from self-employment (from Schedules C and F of Form 1040 and Schedule K-1 of Form 1065), and net
earnings and gains (other than capital gains) from the disposition, transfer, or licensing of property that you created.

Earned income does not include interest, dividends, social security benefits, IRA distributions,
unemployment compensation, deferred compensation, or nontaxable income. It also does not include any amount your spouse paid you.

Caution: Do not consider community property laws in figuring your earned income.
Step 2 (lines 4 and 5). -Figure qualified earned income separately for yourself and your spouse by subtracting certain adjustments from earned income.
Qualified earned income.-This is the amount on which the deduction is based. Figure it by subtracting the total of certain adjustments from earned income. These adjustments (and the related lines on Form 1040) are:

- Employee business expenses (from line 25).
- IRA deduction (from line 26).
- Keogh retirement plan and selfemployed SEP deduction (from line 27).
- Repayment of sub-pay included in the total on line 31. See the instructions on repayment of sub-pay on page 12 of the Form 1040 Instructions.

Enter the total of any adjustments that apply to your or your spouse's earned income in the appropriate column of line 4.
Step 3 (lines 6, 7, and 8). -Figure the deduction based on the smaller of: - the qualified earned income entered in column (a) or (b) of line 5, whichever is less, OR

- \$30,000.

Example.-You earned a salary of $\$ 20,000$ and had $\$ 3,000$ of employee business expenses (Form 1040, line 25). Your spouse earned $\$ 17,000$ and had an IRA deduction of $\$ 1,000$ (Form 1040, line 26). Your qualified earned income is $\$ 17,000$ ( $\$ 20,000$ minus $\$ 3,000$ ) and your spouse's is $\$ 16,000$ ( $\$ 17,000$ minus $\$ 1,000$ ). Because your spouse's qualified earned income is less than yours, the deduction is figured on your spouse's income. Therefore, the deduction is $\$ 1,600$ ( $\$ 16,000 \times .10$ ).

SCHEDULE SE
(Form 1040)
Department of the Treasury
Internal Revenue Service
Computation of Social Security Self-Employment Tax
See Instructions for Schedule SE (Form 1040).
OMB No. 1545.0074
5080
Attachment
Sequence No. 18
Name of person with self-employment income (as shown on social security card)
Social security number of person with self-employment income

## Part 1 Regular Computation of Net Earnings From Self-Employment

Note: If you performed services for certain churches or church-controlled organizations and you are not a minister or a member of a religious order, see the instructions before completing the schedule.
1 Net farm profit or (loss) from Schedule F (Form 1040), line 38, and farm partnerships, Schedule K-1 (Form 1065), line 13a

2 Net profit or (loss) from Schedule C (Form 1040), line 32, and Schedule K-1 (Form 1065), line 13a (other than farming). (See instructions for other income to report.) Employees of an electing church or church-controlled organization do NOT enter your Form W-2 wages on line 2 . See the instructions
Note: $\square$ Check here if you are exempt from self-employment tax on your earnings as a minister, member of a religious order, or Christian Science practitioner because you filed Form 4361. See instructions for kinds of income to report. If you have other earnings of $\$ 400$ or more that are subject to self-employment tax, include those earnings on line 2.


## Part II

Optional Computation of Net Earnings From Self-Employment
(See "Who Can Use Schedule SE" in the Instructions. Also see instructions for other limitations.)
Generally, this part may be used only if you meet any of the following tests:
A Your gross farm income ${ }^{1}$ was not more than $\$ 2,400$; or
B Your gross farm income ${ }^{1}$ was more than $\$ 2,400$ and your net farm profits ${ }^{2}$ were less than $\$ 1,600$; or
C Your net nonfarm profits ${ }^{3}$ were less than $\$ 1,600$ and your net nonfarm profits ${ }^{3}$ were also less than two-thirds $(2 / 3)$ of your gross nonfarm income. ${ }^{4}$
Note: If line 2 above is two-thirds (2/3) or more of your gross nonfarm income ${ }^{4}$, or, if line 2 is $\$ 1,600$ or more, you may not use the optional method.
${ }^{1}$ From Schedule F (Form 1040), line 12, and Schedule K-1 (Form 1065), line 13b.
${ }^{2}$ From Schedule F (Form 1040), line 38, and Schedule K-1 (Form 1065), line 13a.
${ }^{3}$ From Schedule C (Form 1040), line 32, and Schedule K-1 (Form 1065), line 13a.
${ }^{4}$ From Schedule C (Form 1040), line 5, and Schedule K-1 (Form 1065), line 13c.


| 3 | $\$ 1,600$ | 00 |
| :--- | :--- | :--- |
|  |  |  |
| 4 |  |  |
| 5 |  |  |
|  |  |  |
| 6 |  |  |

## Part III Computation of Social Security Self-Employment Tax

7 Enter the amount from Part I, line 1, or, if you elected the farm optional method, Part II, line 4
8 Enter the amount from Part I, line 2, or, if you elected the nonfarm optional method, Part II, line 6.
9 Add lines 7 and 8 . If less than $\$ 400$, do not fill in the rest of this schedule because you are not subject to selfemployment tax. (Exception: If you are an employee of an electing church or church-controlled organization, see the instructions. You may owe self-employment tax on the amount you report on line 12c.)
10 The largest amount of combined wages and self-employment earnings subject to social security or railroad retirement tax (tier 1) for 1986 is

| 7 |  |  |  |
| ---: | ---: | ---: | ---: |
| 8 | 2 | 824 |  |
|  |  |  |  |
| 9 | 2 | 824 |  |
| 10 | $\$ 42,000$ | 00 |  |

11 a Total social security wages and tips from Forms W- 2 and railroad retirement compensation (tier 1). Note: Medicare qualified government employees whose wages are only subject to the $1.45 \%$ medicare (hospital insurance benefits) tax and employees of certain church or church-controlled organizations should not include those wages on this line. (See instructions.)
b Unreported tips subject to social security tax from Form 4137, line 9, or to railroad retirement tax (tier 1)

c Add lines 11 a and 11 b


13 Enter the smaller of line 9 or line 12a
If line 13 is $\$ 42,000$, fill in $\$ 5,166$ on line 14 . Otherwise, multiply line 13 by .123 and enter the result on
line 14
14 Self-employment tax. Enter this amount on Form 1040, line 50
.123

For Paperwork Reduction Act Notice, see Form 1040 Instructions.
Schedule SE (Form 1040) 1986

| AT |  | $83+1$ BL 81 | DD |
| :---: | :---: | :---: | :---: |
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| 63 ＂FLT MIN TAX＂ | 44 KEQ＂X＂ | $86+L$ LL 63 | 83 ＂SCHEid 0 |
| 64 FS？C ${ }^{\text {as }}$ | 45 RCL 48 | 871 E4 | 64 FSTC 69 |
| $65 \mathrm{FC} ? 21$ | 46 XPY ？ | 88 ＊ | 65 FCl 21 |
| 86 PROMPT | $47 \mathrm{X} \backslash>Y$ | 89 ＂EXMP＂ | 86 Pronft |
| 87 XEQ＂P＂ | 48 ＂LOWER＂ | 90 XEQ＂Y＂ | 87 XEQ＂P＂ |
| 08 FC ？ 96 | 49 XEQ＂Y＂ | 91 XKY | 88 XEO CS ＂ |
| 89 YEQ－S＂ | 56 RCL 01 | 92 XEQ ＂W＂ | 4949 |
| 10 XEQ ${ }^{\text {a }}$－ | $51+$ | 93 x゙＝0？ | 1055087 |
| 11 ADY | $52 \mathrm{ST0} 80$ | 94 GTO 18 | 11 ＂SHORT＂ |
| 1246 | 53 ＂BEIT | 955 | 12 XEQ －${ }^{\text {¢ }}$－ |
| 1355097 | 54 XEQ ＂K＂ | 96 \％ | 13510 日句 |
| 14 ＂hedexpr | 55 RCL 96 | 97 ＂20\％＂ | 14 ＂LOHG＂ |
| 15 XEQ ${ }^{\text {\％}}$－ | 56 K ¢ Y | 98 XEQ＂Y－ | 15 XEQ＂X＂ |
| 16 RCL 96 | 57 － | 9951001 | 16 ADV |
| 1720 | 58 STO 01 | 10929 | 17 RCL 日可 |
| $18 \%$ | 59 ＂L3＂ | 101 ST0 67 |  |
| 19 ＂5\％MGI ${ }^{\text {a }}$ | 60 XEQ＂Y＂ | 162 ＂FT49＂ | 19 XEQ＂Y＂ |
| 20 XEQ －Y＊ | 6112 | 183 XEQ＂$\chi^{\text {an }}$ | 26 Entert |
| 21 K＞Y | 62 ST0 07 | 184 RCL 91 | $21 \times$＜${ }^{\text {？}}$ |
| 22 YEQ＂N＂ | 63 ＂XCLSN＊ | 185 XEQ＂N＂ | $22 \mathrm{GT0} 96$ |
| 23 ST0 00 | 64 XEQ ＂ X ＂ | 186 ST0 01 | 23 RCL 51 |
| 2441 | 65 STO 80 | 16757 | 24 X 人 ${ }^{\text {？}}$ ？ |
| 25 ST0 07 | 6648 | 108 ST0 ${ }^{\text {¢ }}$ 7 | 25 CL |
| 26 ＂CONTRE＂ | 67 ST0 87 | 109 ＂FTC＂ | 26 XYY ？ |
| 27 XEQ－x＂ | 68 ＂688CGI＂ | 110 XEQ＂X＂ | 27 RDN |
| 28 ＂CSLTY＂ | 69 KEQ＂x＂ | 111 RCL 01 | 28 ＂19＂ |
| 29 XEQ＂X＂ | 7656 | 112 XV Y ${ }^{113}$ | 29 XEQ－${ }^{\text {\％}}$ |
| 3638 | 71 STO 97 | $113-$ | 36.6 |
| 315 TO 97 | 72 ＂PRF＂ | 114 XCY ？ | $31 *$ |
| 32 ＂MORTG＂ | 73 YEQ＂K＂ | 115 CLX | 3251049 |
| 33 KEQ－${ }^{\text {a }}$ | 74 RCL 01 | 1160 LBL 15 | $33^{6886 C 6 I T}$ |
| 34 RCL 80 | $75+$ | 117 ST0 26 | 34 XEQ－ |
| 35 STO 01 | 76 ＂${ }^{\text {MTII＂}}$ | 118 ＂AM TX＊ | 35－ |
| 3647 | 77 KEQ＂Y＂ | 119 YED ${ }^{\text {P\％}}$ | 36 STO 16 |
| 37 STO 67 | 782 | 120 FC？C 06 | 37 ＂GAIN＂ |
| 38 ＂OTHint＂ | 79 GTO IND 88 | 121 GT0 08 | 38 GTO 14 |
| 39 XEQ－${ }^{\text {x }}$ | $80+$ LBL 95 | 122 GT0 ${ }^{\text {FF3＂}}$ | 390 LBL 06 |
| 40 STO 80 | 81 LEL 82 | 123 END | 46 B |
| 4154 | 82 ISG X |  | 4157049 |
|  |  |  | 42 RDN |
|  |  |  | 43 RCL 50 |
|  |  |  | $44 \times 10$ ？ |
|  |  |  | 45 CTO 96 |
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$85 \mathrm{x}=\mathrm{\theta}$ ？
86 GTO 66
87 RCL 51
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89 CL
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91 XE日＂Y＂
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95 XEQ＂Y＂
96 RCL 16
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98 RDH

99 STO 61
100 ＂ 27 ＂

102 －
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184 CL：
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106 ＂SHRTCO＂
107 XEQ＂Y＂
108 RCL 16
169 RCL 81
110 －
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112 ＂ 29 ＂
113 XEE＂ Y ＂
114 RCL 51
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117 ＂30＂
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121 RCL 56
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128 XEQ＂Y＂
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133 XEQ＂ T ＂
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$135 \mathrm{x}>8$ ？
136 CLX
137 \＆LBL 66
138 ＂LNGCO＂
139＊LBL 14
146 XEQ＂Y＂
141 SF 25
142 FS？C 06
143 GT0＂T2＂
144 DF 25
145 GTO 90
146 END

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| 64 PROMPT | 12 YEQ＂X＂ |
| 8564 | 13 ST0 95 |
| 86 XEE ＂P＂ | 14 ＂INT＂ |
| 07 ＂SE INC＂ | 15 XEE－ \％$^{\text {c }}$ |
| 68 KEQ－${ }^{\text {¢ }}$ | $16 \mathrm{ST}+65$ |
| 69 ＂SS MGS＂ | 17 edivs |
| 10 YEQ＂${ }^{\text {\％}}$ | 18 KEQ＂${ }^{\text {\％}}$＂ |
| 11 ADY | 19 STO 01 |
| 124 E2 | 20 ＂EXCLSN＂ |
| 13 RCL 65 | 21 YEQ＂X＂ |
| 14 ＂L9＊ | 22 RCL O1 |
| 15 XEX－${ }^{\text {P }}$ | 23 K YY |
| $16 \mathrm{~K} \mathrm{Y}^{\prime}$ ？ | 24 － |
| 17 CLX | $25 \times$ ¢ ${ }^{\text {？}}$ |
| 18 8＝8？ | 26 CLX |
| 19 GTO 10 | 27 ＂NeTdiy＂ |
| 2042 E 3 | 28 XEE－Y＂ |
| 21 RCL 66 | 29 RCL 85 |
| 22 ＂Lilc＂ | $36+$ |
| 23 KEQ＂${ }^{\text {\％}}$ | 31590 |
| 24 － | 32 ＂ST RF＂ |
| 25 k 0 ？ | 33 XEQ＂义̛＂ |
| 26 CL | $34^{\text {5 5CH }}{ }^{\text {c＊}}$ |
| 27 ＂Li2a＂ | 35 細＂x\％ |
| 28 XEQ＂Y＊ | 36 ＂SCH D＂ |
| 29 RCL 65 | 37 YEQ＂प＂ |
| $30 \times 29$ ？ | $38{ }^{\text {c }}$ SH E＂ |
| 31 KOY | 39 KEE－ x ＂ |
| 32 ＂L13＂ | 40 ＂INC＂ |
| 33 XER＂Y＊ | 41 KEQ＂K＂ |
| 34.123 | 42 STO 01 |
| 35＊ | 43 ＂IRA＂ |
| $36+$ LBL 18 | 44 XEQ － $\mathrm{X}=$ |
| 37 ST0 25 | $45{ }^{\text {s SCH H＊}}$ |
| 38 ＂SE TX＂ | 46 KEQ ${ }^{\text {\％}}$－ |
| 39 XEQ－4＂ | 47 ＂ADJ＂ |
| 40 GTO 90 | 48 XEQ＂K＂ |
| 41 END | 49 RCL 01 |
|  | $50 \mathrm{X} \backslash \mathrm{Y}$ |
|  | 51 － |
| FT | $52 \times 10$ ？ |
|  | 53 CLX |
| ${ }^{01}+\mathrm{LBL}$＂FT＂ | 5457086 |
| 62＋LBL 80 | 55 ＂RGI＂ |
| 63 ＂FORH 1646＂ | 56 KEQ－$\%$＂ |
| 84 CF 25 | 57 SF 25 |
| 85 FS？ 69 | $58 \mathrm{GTO}{ }^{\circ} \mathrm{FF}=$ |
| 66 FC ？ 21 | 59 CF 65 |
| 97 PROAPT | 60 GTO 80 |
| 88 KER＂P＂ | 61 EMD |


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|  |  | 49 AVIEH |  |
|  | 61+LBL "K" | 50 STO 87 | 97 Prompl |
| 033 | 82 ASTO 85 | 51 CLI | 98 RCLL IND ${ }^{99}$ |
| 04 STO 07 | 63 "0TH" | 52 RTH | 106 K X Y \% |
| $95{ }^{\circ} \mathrm{G7} 7^{\circ}$ | 04 PRCL 65 |  | 101 STO IND 87 |
| 86 KEQ - ${ }^{\text {\% }}$ | 86 cLx |  | 102 RND |
| 67 RCL 82 |  | 55 Sto ${ }^{\text {ario }}$ | $103 \mathrm{ST}+80$ |
| $88 \mathrm{~K} \backslash \mathrm{Y}$ | 68 "TOT- | 57 CTO 90 | 164 FS? 21 |
| 89 - | ${ }_{69} 9$ ARCL 85 | $58+\mathrm{LBL}$ "S. | $105 \mathrm{~S}=1$ ? |
| 10 R ${ }^{\text {a }}$ | 10 XEQ -Y" | 595 | 106 RTH |
| 113 EB | 11 ADY | 66 RCL 98 | 107 YIEH X |
| 12 XTY ? | 12 RTH | 61 ABS | 108 CLD |
| 13 GTO ${ }^{\text {NHG }}$ | 13*LBL "LP* | 62 INT | 189 RTN |
| 15 GVIEN | 14 "PRGH? ${ }^{\text {a }}$ | $63 \mathrm{~K}=Y$ ? | $110+$ LBL ${ }^{-11}$ |
| 16 FC ? 21 | 15 RON | $64 X=8$ ? | 112*LBL - $\%$ " |
| 17 PR04PT | 17 ROFF | 652598 | $113+L$ BL 12 |
| 18 RCL 93 | 18 CF G6 | 6678 | 114 RND |
| 19 GTO 10 | 19 GTO 86 | 68 STO 97 | 115 " $=$ " |
| $29+$ LBL 96 | 20*LBL "L" | 69 -SThtus* | 116 ARCL 8 |
| 21 RDN | 21 SF 66 | 70+LBL ${ }^{\text {¢ }}$ - | 117 FC ? 21 |
| 224 | 22 SF 99 | 71+LBL 11 | 118 GTO 13 |
| $23 /$ | 23 LBL 86 | 72 ISG 87 | 119 ACA |
| 24 RHD | 24 ASTOL | 73*LBL 99 | 120 ADY |
| 25 RCL 264 | 25 SF 25 | 74 RCL IND 67 | 121 FS?C 10 |
| 27 XEQ "R" | 26 GT0 IND L | 75 FC ? 21 | 122 ADY |
| 28 RNI | 27 SF 25 | 76 GT0 13 | $124+$ LBL 13 |
| 29 RCL 84 | 29 FS ? 25 | 77 ASTOL | 125 FC?C 10 |
| 30 XEQ "R" | 30 GTO IND L | 79 FS? 38 | 126 FC? 84 |
| 31 RNI | 31 SF 25 | 80 SF 19 | 127 PROMPT |
| 32 RCL Y | 32 REAIP | 81 FIX ${ }^{\text {d }}$ | 128 RTN |
| $33 \mathrm{X} Y \%$ | 33 FCOC 25 | 82 CLA | 129*LBL "2" |
| $34-$ | 34 CF 86 | 83 HRCL 87 | 130367 |
| 353 | 35 GTO IND L | $88{ }^{\text {" }}$ - | 131 GTO IND 88 |
| $\begin{array}{r}36 \\ 37 \\ \hline\end{array}$ | 360 LEL ${ }^{\prime \prime}$ " | 85 ACA | 1324 LBL 93 |
| 38 "SG TX" | 37 XEE -9* | 86 CLA | 13364.5 |
| 39 Yeg - $\mathrm{y}^{\text {a }}$ |  | 87 ARCL L |  |
| 40+LBL 10 | 39 GTO 11 | 88 FS? 10 | $136+$ LBL 94 |
| 41 RCL 93 | $46+$ LBL ${ }^{\text {d }} \mathrm{H}=$ | 89 FIX 2 | 137119 |
| 42 XPY ? | 41 42 r | 90+LBL $91{ }^{\text {a }}$ - | 138 - |
| 43 K ¢ $\mathrm{Y}^{\prime}$ | $43 \mathrm{X} \times 0$ ? | 92 ARCL $X$ | 1394 LBL 85 |
| 44 "L0 Tư" | 44 CLX | 93 FS ? 21 | 1480LBL 92 |
| 45 朗 "Y* | 45 "NET" |  | 14110 |
| 46 FS? 21 | 46 GTO 12 | 94 HDY | 142 * |
| 47 PROMPT | 47*LBL -P. | 96 FC? 93 | 143 END |
| 48 END | 48 FS ? 21 |  |  |


| F2 |  |  | R6 |
| :---: | :---: | :---: | :---: |
| 01＊LBL＂F2＂ | 47 ＊ | 93 ＂SE TX＇ |  |
| 92＋LBL 90 | 483 E 3 | 94 YEE＂X\％ | 024 LBL 90 |
| $63^{\prime \prime} 1648 \mathrm{P} 2^{\prime \prime}$ | $49 \mathrm{X}=\mathrm{Y}$ ？ | 95 ＂ BT ＂ | 63 CF 88 |
| 64 FSTC 09 | 50 ISG L | 96 FS ？ 82 | 64 ST0 日2 |
| 65 FC？ 21 | $51+$ LEL 60 | 97 GT0＂L＂ | 65 ＂TXAEL＂ |
| 86 PROMPT | 52 RDH | 98 ＂明 Tx＂ | 66 FS？ 21 |
| 87 XEQ＂P＂ | 53 LASTX | 99 XES＂X＂ | 67 XEQ－Y＂ |
|  | 5425 | 160＋LBL＂F3＂ | 88 YEQ＂S＂ |
| 09 KEQ＂Q＂ | 55 ＊ | 161 RCL 25 | 69 RCL 62 |
| 18 ADY | 56 min | $102+$ | 10 GTO 86 |
| 1121 | 57 LASTX | 183 RCL 38 |  |
| $12 \mathrm{ST0} 97$ | 582 | $164+$ | 12 SF 98 |
| $13 \times L B L$＂FF＊ | $59 \%$ | 10557000 | $13+L B L 6{ }^{6}$ |
| 14 ＂SA＂ | 66 RDM | 10626 | $14 \times 8$ ¢ 15 cto 95 |
| 15 F 5 ？ 88 | 61 － | 167 ST0 97 | 15 Stu |
| 16 GTO ＂L＂ | 62 Rf | $188{ }^{\text {＂TX }}$ | 16 CLX STO |
| 17 ＂DEDS ${ }^{\text {a }}$ | $63+$ | 109 YEQ＂K＂ | 17 ST0 ${ }^{\text {cos }}$ |
| 18 XEQ－${ }^{\text {\％}}$ | 64＊LEL 46 | 110 STO 93 | 18 RDH |
| 194LBL＂FI＊ | 65 XEQ＂R＂ | 111 YEQ＂W＂ | 19 SF 89 |
| 29 RCL 86 | 66 FC 9 C 日7 | 112 SF 25 |  |
| 21 XYY | 67 GT0 89 | 113 FS？C 65 |  |
| 22 － | 68 ＂H＂ | 114 GTO＂TX ${ }^{\text {c }}$ | $\begin{aligned} & 22 \text { GT0 INI } 88 \\ & 23+L B L \text { 01 } \end{aligned}$ |
| $23 \times 10$ ？ | 69.5 | 115 SF 25 | ${ }_{24} 23+288119168$ |
| 24 CLX | $76+$ | 116 GTO ＂FT＂ | ${ }_{25} 24.24811911223$ |
| 25 ＂L35＂ | 71 INT | 117 GTO 96 | 26 XEQ 11 |
| 26 XEQ－Y＊ | 724LBL 69 | 118＊LBL＂W＂ | 27.226216248 |
| 27 RCL 99 | 73 STO 93 | 119 ST0 01 | 27.226216248 |
| 281886 | 74 XEQ－$\%$－ | 128 ＂ $\mathrm{H} / \mathrm{HLD}$ | 29.227227345 |
| 29 ＊ | 75 ＂SG＂ | 121 KEQ＂X＂ |  |
| 30 ＂EXMP\％＂ | 76 FS ？ 01 | 122 ST0 08 | 31.572572572 |
| 31 XEQ－$\%$＂ | 77 GT0＂L＂ | 123 ＂ $\mathrm{Pl}^{\text {c }}$ |  |
| 32 － | 78＊LEL＊F2＂ | 124 KEC＂ K ＂ | 32 XEQ 11 |
| $33 \times 10$ ？ | 7951003 | 125 RCL 01 |  |
| 34 CLX | 8022 | 126 K\Y |  |
| 3551002 | 8151097 | 127 － | 361489 |
| 36 ＂TXAEL＂ | 82 ＂CRITSa＂ | 128 ST0 65 | 37 XEQ 69 |
| 37 XEQ－Y＂ | 83 \％EP＂X＂ | 1294LEL＂0］ | 382869 |
| 38 CF 97 | 84 RCL 93 | 130 ＂BAL DUE＂ | 38 YEQ 99 |
| 395 E4 | 85 XEQ ＂H＂ | $131 \times 10$ ？ | 39 CLO <br> 48 <br> 18 |
| $49 \mathrm{XX} \times \mathrm{Y}$ | 86 ST0 11 | 132 ＂RFND ${ }^{\text {c }}$ |  |
| $41 \mathrm{M} \times \mathrm{Y}^{\text {？}}$ | 87 ＂CRITSb＂ | 133 ABS | 42 CF 69 |
| 42 XH | 88 KEP＂X＂ | 134 BEEP | 432 |
| $43 \mathrm{GTO} \mathrm{O}_{6}$ | 89 RCL 91 | 135 XEQ＂Y＝ |  |
| 44 ENTERT | 96 KEE－ $\mathrm{N}=$ | 136 END | $44 \times 15{ }^{4}$ |
| 45 SF 97 | 9151030 |  |  |
| 461 | 92 ADY |  |  |

R6

| 47.367227226 | $93 \mathrm{~K}\rangle 81$ | R7 |  |
| :---: | :---: | :---: | :---: |
| 481.112224335 | 94 INT |  |  |
| 49 YEQ 11 | $95 \%$ | 610LBL "R7" | 474LEL 89 |
| 50.464443453 | $96 \mathrm{ST}+90$ | 620 LBL 6 B | 48 - |
| 51 XEQ 12 | 97 KDN | 03 STO 22 | $49 \times 8$ ? |
| 52.475572571 | $98 \times 1 \times Y$ | 64 "TХАВL" | 49.0 90? |
| 53 YEQ 12 | $99 \mathrm{X}>8$ ? | 65 FS? 21 | 51 RDN |
| 541.144 | 100 GT0 12 | 86 YEQ - $\mathrm{Y}=$ | 52 CLX |
| 55.54341 | $101 \mathrm{~K} \backslash \mathrm{Y}$ | 87 XEQ ${ }^{\text {cs }}$ " | 53 RTH |
| 56 XEQ 11 | 182 RTN | 88 CLX | $54+$ LEL 96 |
| 571533 | 103*LBL 94 | 99 ST0 08 | 54.1 E2 |
| 58 KED 69 | 184.248227226 | 10 RCL 82 |  |
| 592762 | 1051.112312444 | 11 SF 99 | 56 CL |
| 60 XEQ 09 | 106 XEQ 11 | 121 E 2 | 58 RCL 01 |
| 612568 | 187.238334346 | $13 \%$ | 59 FRC |
| 62 XEQ 99 | 108 XEQ 12 | 14.11941367 | 66 X ${ }^{\text {¢ }}$ ¢ 01 |
| 635728 | 109.345572572 | 15 ST0 81 | 61 INT |
| 64 SEE 69 | 110 KEQ 12 | 16 RDN | $62 \%$ |
| 65 GTO 18 | 111.572 | 17 GTO INJ 88 | 63 ST +00 |
| $66+$ LBL 11 | 112.37332 | $18+L B L$ 91 | 64 KDN |
| 67 STO 01 | 113 XEQ 11 | 19.818150102 | 65 X ¢ $\backslash Y$ |
| 68 RDN | 1141144 | 28 YEQ 12 | $66 \times>8$ ? |
| 69+LEL 12 | 115 XEQ 69 | 21270 | 66 GTO 12 |
| 70 RDN | 1161715 | 22 XEQ 12 | 68 XYY |
| $71 \mathrm{~K}=0$ ? | 117 XEQ 89 | 23 GTO 13 | 68 KTY |
| 72 RTN | 1182288 | 24*LBL 63 | $\begin{aligned} & 69 \text { RTN } \\ & 760 \text { LEL } 84 \end{aligned}$ |
| 73 RT | 119 XEQ 69 | 25 CF 99 |  |
| 741 E3 | 1202860 | 262 | 72 YEQ 12 |
| 75 * | 121 XEQ 99 | 27 * | 73 420 |
| 76 FRC 77 XCOY | 122+LBL 10 | 28*LBL 02 | 74 XEA 12 |
| 77 XKYY | 123 RCL 85 | 29*LBL 05 | 75+LEL 13 |
| 78 LPSTX | 124 RCL 98 | 30.83025017 | 763.5 |
| 79 INT | 1255 | 31 XEQ 12 | $77 \%$ |
| $80+$ LEL 99 $81-$ | 126 FS?C 69 | 32450 | $78 \times 8$ ? |
| $81-$ 82 X | $127 \mathrm{ST}+\mathrm{K}$ | 33 XEQ 12 | 79 ST+ 日可 |
| 82 X $70 ?$ 83 GT0 96 | 128 * | 34 GTO 13 | 80 RCL 89 |
| 83 GT0 96 | 129 -TX86* | 350 LBL 12 | 8150 |
| 84 RDN 85 CLX | 130 FS ? ${ }^{\text {c }} 88$ | 36 RDN | 82 FS ? 89 |
| 86 RTN | 131 RTN 132 STO 93 | $37 \mathrm{XK}=8$ ? 38 RTN | $83 \mathrm{ST}+\mathrm{X}$ |
| 874LEL 86 | 133 XEQ - $\%$ - | 39 Rt |  |
| 8810 | 134 FS? 21 | 48 INT | 85 86 "TX87** 863 |
| 89 ST* 01 | 135 PROMPT | 41 LASTX |  |
| 99 CLX | 136 GTO 08 | 42 FRC | 88 FS? 21 |
| 91 RCL 01 | 137 END | 431 E3 | 89 PROHPT |
| 92 FRC |  | $44 *$ | 90 GTO 90 |
|  |  | 45 STO T | 91 END |
|  |  | 46 RDN |  |


| R8 | 5 A |  | 5 G |
| :---: | :---: | :---: | :---: |
| 01*LBL "R8" | 01*LBL "SA" | 50 XEQ "प̆ | 61+LBL "SG" |
| 620LBL 96 | 02+LBL 00 | 51 "SLS TX ${ }^{\text {a }}$ | 02+LBL 96 |
| 03 ST0 92 | 03 "SCHEE A" | 52 XEQ "X" | 63 "SCHED $6^{\circ}$ |
| 04 "TXABL" | 64 FS?C 69 | 53 "TXS* | 04 FS 2 C 89 |
| 65 FS? 21 | 05 FC ? 21 | 54 XEQ ${ }^{\text {K/ }}$ | 65 FC 221 |
| 86 Y EQ $^{\text {- }} \mathrm{Y}$ " | 86 PROMPT | $55 \mathrm{ST}+81$ | 06 PROHPT |
| 67 XEQ "S. | 07 XEQ "P. | 56 "HORTG" | 6751 |
| 88 CLX | 88 FS? 86 | 57 XEQ - $\mathrm{X}=$ | 68 KEQ -p\% |
| 695 ST 08 | $09 \mathrm{GT0} 86$ | 58 "CRITCI* | 69 "83inc" |
| 18 RCL 82 | 10 XEQ " ${ }^{\text {c }}$ | 59 XEQ " $\mathrm{X}^{\text {" }}$ | 10 KEQ "X" |
| 11 GTO IND 88 | 11 XEQ - ${ }^{\text {a }}$ | 68 "INT" | 11510 90 |
| $12+$ LBL 91 | 12 ADY | 61 KEQ " K " |  |
| 1317856 | 13+LBL 96 | $62 \mathrm{ST}+01$ | 13 KEQ 14 " |
| 14 GTO 16 | 1438 | 63 RCL 39 | 14 "85inc* |
| $15+$ LBL 83 | 15 ST0 67 | 64 - | 15 XEQ "x" |
| 1614875 | 16 "DRGG" | 6557048 | 16 RCL 98 |
| 17 GTO 10 | 17 XEQ -X" | 66 "CONTRE* | 17 "T0TAL" |
| 184LBL 92 | 18 STO 00 | 67 XEQ "X" | 18 KEE "Y* |
| 19*LBL 95 | 19 "DCTRS" | $68 \mathrm{ST}+81$ |  |
| 2629756 | 20 XEQ - ${ }^{\text {P/ }}$ | 69 "CSLTY" | $21^{\prime} 16^{\prime \prime}$ |
| 21 GTO 10 | 21 "TRHSP" | 70 KEQ "X" | 21 "L6" |
| 224 LBL 94 | 22 YEQ "X" | $7151+61$ | 22 XEQ ${ }^{\text {Y }}$ |
| 2323968 | 23 "HED" | 72 ADY | 231.4 |
| 24+LBL 19 | 24 KEQ "K* | 73 "DUES ${ }^{\text {a }}$ | 24 * |
| $25 \mathrm{~K} / \mathrm{Y}$ | 25 RCL 86 | 74 XEQ "X" | 25 STO 84 |
| 2615 | 2620 | 75 STO 98 | $\begin{aligned} & 26 \text { STO } 84 \\ & 27 \text { " } 67{ }^{2} \end{aligned}$ |
| $27 \%$ | 27 / | 76 "TXPREP" | 28 XEQ -y. |
| $28 \mathrm{~K}\rangle 2$ | 28 "5\%AGI" | 77 XEQ "X" |  |
| $29-$ | 29 XEQ "Y" | 78 "HSC* | $38+$ LBL ${ }^{\text {che }}$ |
| 30.13 $31 \%$ | 30- | 79 XEQ - $\mathrm{K}=$ | $31{ }^{\text {S SCH G G }}$ BTH* |
| $31 *$ $32 \times 8$ ? | $31 \mathrm{X} \times 8$ 32 CLX | 88 RCL 91 | 32 PROMPT |
| $33 \mathrm{ST}+\mathrm{Y}$ | 33 STO 47 | 82 "totded" | 33.3 |
| 34 RDN | 34 GT0 96 | 83 XEQ -Y" | 34 XEQ "p* |
| 35 "TX88 ${ }^{\text {a }}$ | $35+L B L$ "A8* | 84 XEQ "2" | $35 \times 67{ }^{36} \times 2$. |
| 36 STO 03 | 36 "SCH A BTM" | 85 -28A" |  |
| 37 XEQ ${ }^{\text {\% }}$ - | 37 PROMPT | 86 XEQ - $Y$ " | 37+LBL 66 |
| 38 FS ? 21 | 3834 | 87 - | 38 RCL 82 |
| 39 PROMPT | 39 YEQ -P- | 88 K< ${ }^{\text {? }}$ | 39 XKY |
| $46 \mathrm{GT0} 86$ | 40 RCL 47 | 89 CLX |  |
| 41 END | $41+$ LEL 86 | 90 STO 22 | $41^{\text {LLI }}$ " |
|  | 42 STO 91 | 91 "HETDED* | 42 XEQ "Y* |
|  | 43 "HETMED* | 92 XEQ "Y- | 433 ES |
|  | 44 XEQ "Y* | 93 FC?C 96 | $44 \mathrm{~K}=\mathrm{Y}$ ? |
|  | 45 HDY | 94 GTO 00 | 45 GT0 86 |
|  | 46 "ST TX" | 95 ADY |  |
|  | 47 XEQ * ${ }^{\text {¢ }}$ | $96 \mathrm{GTO}{ }^{\circ} \mathrm{FI}$. |  |
|  | 48 STO 90 | 97 END |  |
|  | 49 "RE TX* |  |  |


| SG | TX |  | ZLOAD |
| :---: | :---: | :---: | :---: |
|  |  |  | 81*LBL "ZLOAD ${ }^{\text {a }}$ |
|  | 01*LBL "TX" | 28 * | 82 "K" |
| 47 "NG" | $82+$ LBL 08 | 29 ST0 20 | 63 hyieh |
| 48 FC ? 21 | 63 "INCOME TAX" | 30 "DEI" | 64 Rehisub |
| 49 PROMPT | 94 PROMPT | 31 XEQ - $\mathrm{Y}=$ | 85 "R6" |
| 56 RCL 93 | 85 "D7" | 32 SF 25 | 86 AYIEH |
| 51 GT0 10 | ${ }^{86}$ GT0 "L" | 33 FS 9 C 86 | 67 RERISUB |
| 524LBL 66 | 07*LBL "T2" | 34 GT0 ${ }^{\text {¢ }} 44^{\prime \prime}$ | 88 "P2" |
| 53 RDN | 08 "以И" | 35 CF 25 | 69 fuIEM |
| 544 | 69 GTO "L" | 3667080 | 10 repasub |
| 55 \% | 100LBL ${ }^{\text {c }}$ T4" | 37*LBL 98 | 11 "TX" |
| 56 "L15* | 11 SF 65 | 38 ASTO 65 | 12 guien |
| 57 XEQ - 4 * | 12 "FT" | 39 "HAGES* | 13 READSU8 |
| 58 RCL 04 | 13 GTO -L" | 46 ARCL 85 | 14 "69" |
| $59+$ | 14 GTO 60 | 41 YEQ "X" | 15 AYIEH |
| $68{ }^{-17,19}{ }^{-}$ | 15 END | 42 STO 80 | 16 READSUB |
| 61 XEQ - ${ }^{\text {¢ }}$ |  | 43 "BFT* | 17 "FT" |
| 62 XEQ "R" |  | 44 ARCL 05 | 18 AVIEH |
| 63 "20,21" | WW | 45 XEQ " $\chi^{\text {a }}$ | 19 READSUB |
| 64 KEQ - 4 " |  | 46 RCL 88 | 29 XEQ 88 |
| 65 RCL 94 |  | 47 "TOTAL" | 21 "DD" |
| 66 XEQ "R" | 02+LBL 96 | 48 XEQ - $Y$ - | 22 XEQ 97 |
| 67 "L22" | 03 FSCOC 09 | 49 "ADJ" | 23 "WH" |
| 68 KEQ "Y" | ${ }_{65} 64$ FC? 21 | 50 ARCL 85 | 24 KEQ 87 |
| 69 RCL Y ${ }^{\text {Y }}$ | 86 PROMPT | 51 SEX 52 | 25 "SA" |
| $70 \mathrm{XK} \mathrm{C}^{7}$ | 0758 | 52 53 5 ST | 26 XEQ 97 |
| $71-$ |  | 53 ST- 60 | 27 "SG" |
| 72 "L23* |  | 54 RCL 80 55 56 - KET" | 28 XEQ 07 |
| 73 XEQ - 4 - | 10 XEQ 98 | 55 "NET" | 29 "月T" |
| 743 | 10 Sto 11 | 56 XEQ "Y" | 36 XEQ 97 |
| 75 * | $11{ }^{\text {cho }}$ | 57 ADV | 31 "EE" |
| 76 "L24* |  | 58 END | 32 XEQ 87 |
| 77 KEQ - $4=$ | 13 KEQ 68 |  | 33 "R7" |
| $78+$ | 14 RCL 59 |  | 34 XEQ 97 |
| 79 "SG TX" | 15 RCL 62 $16+$ |  | 35 "R8* |
| 80 XEQ "Y" | $17{ }^{1}$ STO 10 |  | 36 XEQ 87 |
| $81+$ LBL 18 | 18 RDN |  | 374LEL 18 |
| 82 RCL 93 | 18 RDN |  | 38 "XEQ CLP" |
| $83 \mathrm{X}>\mathrm{Y}$ ? | 19 RCL 01 |  | 39 BEEP |
| 84 X ¢Y | $20 \mathrm{X}>$ Y? |  | 49 PROMPT |
| 85 "L0 TX" | $21 \times 1$ |  | $41+$ LEL 97 |
| 86 XEQ - $\%$ " | $223 \mathrm{E4}$ |  | 42 GYIEM |
| 87 FC?C 06 |  |  | 43 RERDP |
| 88 GT0 00 | 24 25 - ${ }^{\text {a }}$ |  | 44*LEL 88 |
| 89 GT0 -F2* | 25 "L6". |  | 45 SF 25 |
| 98 END | 26 XEQ -Y" |  | 46 SAYEP |
|  | 27.1 |  | 47 FC ¢ 25 |
|  |  |  | 48 GTO 16 |
|  |  |  | 49 END |

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AT 304 BYTES 44 REGISTERS
ROW 1 OF 26: LINES 1-3
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ROW 2 OF 26: LINES 3-6
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||{||||||||||||||||||||||||||||||||||||||||
ROW 3 OF 26: LINES 7-11
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ROW 4 OF 26: LINES 12-15
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 5 OF 26: LINES 15-20
```



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ROW G OF 26: LINES 20-26
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 26: LINES 26-28
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ROW 8 OF 26: LINES 28-32
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ROW 9 OF 26: LINES 32-38
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 10 OF 26: LINES 38-42
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 11 OF 26: LINES 43-45
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ROW 12 OF 26: LINES 46-50
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 13 OF 26: LINES 51-57
```



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ROW 14 OF 26: LINES 58-63
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 15 OF 26: LINES 63-68
```


$87 / 01 / 11 \quad 14: 37$

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AT 304 BYTES 44 REGISTERS
ROW 16 OF 2G: LINES E8-71
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 17 OF 26: LINES 72-76
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 18 OF 26: LINES 76-82
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ROW 19 OF 26: LINES 83-89
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ROW 20 OF 26: LINES 89-94
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ROW 21 OF 26: LINES 95-100
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 22 OF 26: LINES 101-105
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 23 OF 26: LINES 105-110
```



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ROW 24 OF 26: LINES 111-118
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ROW 25 OF 26: LINES 118-122
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ROW 26 OF 26: LINES 122-123
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
87/01/11 14:37 (05:58)
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DD 295 BYTES 43 REGISTERS
ROW 1 OF 25: LINES 1-3
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ROW 2 OF 25: LINES 3-8
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ROW 3 OF 25: LINES 8-12
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 4 OF 25: LINES 12-16
```



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ROW }5\mathrm{ OF 25: LINES 17-23
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 6 OF 25: LINES 23-30
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 25: LINES 30-34
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ROW 8 OF 25: LINES 34-38
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 9 OF 25: LINES 39-47
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||{||||||||||||||||||||||||||||
ROW 10 OF 25: LINES 48-55
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 11 OF 25: LINES 56-63
|||||||||||||||{||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 12 OF 25: LINES 63-71
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||{|||||||||||||||||||||||||||||||||||||||||
ROW 13 OF 25: LINES 72-77
||||||||||||||||||||||||||{||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 14 OF 25: LINES 77-84
||||||||||||||||||||||||||{||||||||||||||||{|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 15 OF 25: LINES 84-90
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$87 / 01 / 11 \quad 14: 54$


ROW 17 OF 25: LINES 96-103

ROW 18 OF 25: LINES 104-107


ROW 19 OF 25: LINES 108-114

ROW 20 OF 25: LINES 114-120

ROW 21 OF 25: LINES 121-127

ROW 22 OF 25: LINES 127-133

ROW 23 OF 25: LINES 133-138


ROW 24 OF 25: LINES 139-143


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ROW 25 OF 25: LINES 144-146
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$87 / 01 / 11 \quad 14: 54 \quad(05: 43)$

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EE 117 BYTES 17 REGISTERS
ROW 1 OF 10: LINES 1-3
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 2 OF 10: LINES 3-7
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ROW 3 OF 10: LINES 7-9
||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 4 OF 10: LINES 9-13
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ROW 5 OF 10: LINES 14-20
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |||||{|||||||||||||||||||||||||||||||||
ROW 6 OF 10: LINES 20-23
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 10: LINES 23-28
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ROW 8 OF 10: LINES 29-34
```



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ROW 9 OF 10: LINES 34-38
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 10 OF 10: LINES 38-41
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87/01/11 15:00 (02:15)
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FT 180 BYTES 26 REGISTERS
```

ROW 1 OF 15: LINES 1-3

ROW 2 OF 15: LINES 3-7

ROW 3 OF 15: LINES 8-11

ROW 4 OF 15: LINES 11-15

ROW 5 OF 15: LINES 16-20

ROW 6 OF 15: LINES 20-24
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 15: LINES 25-28

ROW 8 OF 15: LINES 29-33

ROW 9 OF 15: LINES 34-36

ROW 10 OF 15: LINES 36-38

ROW 11 OF 15: LINES 39-43

ROW 12 OF 15: LINES 43-45

ROW 13 OF 15: LINES 46-50

ROW 14 OF 15: LINES 51-57

ROW 15 OF 15: LINES 57-61

87/01/11 15:02 (03:26)

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GQ }88\mathrm{ BYTES }13\mathrm{ REGISTERS
ROW 1 OF 8: LINES 1-5
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 2 OF 8: LINES 6-13
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 3 OF 8: LINES 13-20
||||||||||||||||||||||||||||||||||||||||||{||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 4 OF 8: LINES 21-30
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ROW 5 OF 8: LINES 30-38
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW G OF 8: LINES 38-44
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ROW 7 OF 8: LINES 44-4B
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ROW 8 OF 8: LINES 48-49
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
87/01/11 15:08 (01:44)
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K 300 BYTES 43 REGISTERS
ROW 1 OF 25: LINES 1-4
```



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ROW 2 OF 25: LINES 4-9
```



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ROW 3 OF 25: LINES 9-13
```



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ROW 4 OF 25: LINES 14-19
```



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ROW 5 OF 25: LINES 19-24
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 6 OF 25: LINES 24-30
|{||||||||||||||||||||||||||||||||||{|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 25: LINES 30-36
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ROW 8 OF 25: LINES 36-38
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||||
ROW 9 OF 25: LINES 38-44
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 10 OF 25: LINES 45-48
|||||||||||||||||||||||||||||||||||||||||||||||||||{||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 11 OF 25: LINES 48-55
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ROW 12 OF 25: LINES 56-59
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ROW 13 OF 25: LINES 60-69
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 14 OF 25: LINES 69-72
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ROW 15 OF 25: LINES 73-79
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87/01/11 15:10
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ROW 16 OF 25: LINES 79-85
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ROW 17 OF 25: LINES 85-91

ROW 18 OF 25: LINES 91-98

ROW 19 OF 25: LINES 98-106

ROW 20 OF 25: LINES 107-112

ROW 21 OF 25: LINES 112-116

ROW 22 OF 25: LINES 117-124

ROW 23 OF 25: LINES 125-130

ROW 24 OF 25: LINES 130-136

ROW 25 OF 25: LINES 137-143

87/01/11 15:10 (05:41)

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P2 329 BYTES 47 REGISTERS
ROW 1 OF 28: LINES 1-3
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 2 OF 28: LINES 3-8
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ROW 3 OF 28: LINES 8-13

ROW 4 OF 28: LINES 13-17

ROW 5 OF 28: LINES 17-19

ROW 6 OF 28: LINES 19-26

ROW 7 OF 28: LINES 26-30

ROW 8 OF 28: LINES 30-36

ROW 9 OF 28: LINES 36-41

ROW 10 OF 28: LINES 42-49

ROW 11 OF 28: LINES 50-59

ROW 12 OF 28: LINES 60-67

ROW 13 OF 28: LINES 68-74

ROW 14 OF 28: LINES 75-78

ROW 15 OF 28: LINES 78-82



ROW 17 OF 28: LINES 87-91

ROW 18 OF 28: LINES 91-95

ROW 19 OF 28: LINES 95-98

ROW 20 OF 28: LINES 98-101
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 21 OF 28: LINES 102-108

ROW 22 OF 28: LINES 109-114

ROW 23 OF 28: LINES 114-118

ROW 24 OF 28: LINES 118-121

ROW 25 OF 28: LINES 121-126

ROW 26 OF 28: LINES 127-130
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 27 OF 28: LINES 130-135

ROW 28 OF 28: LINES 135-136

$87 / 01 / 11$ 15:16 (06:25)

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R6 414 BYTES 60 REGISTERS
ROW 1 OF 35: LINES 1-5
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 2 OF 35: LINES 5-8
|/|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 3 OF 35: LINES 9-14
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 4 OF 35: LINES 15-22
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 5 OF 35: LINES 23-24
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ROW 6 OF 35: LINES 25-26
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 35: LINES 26-27
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 8 OF 35: LINES 28-29
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 9 OF 35: LINES 29-31
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 10 OF 35: LINES 31-33
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 11 OF 35: LINES 33-37
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 12 OF 35: LINES 37-41
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 13 OF 35: LINES 42-47
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 14 OF 35: LINES 47-48
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 15 OF 35: LINES 48-50
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
87/01/11 15:23
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RG 414 BYTES G0 REGISTERS
ROW 16 OF 35: LINES 50-52
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 17 OF 35: LINES 52-54
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ROW 18 OF 35: LINES 54-56
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 19 OF 35: LINES 57-60
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ROW 20 OF 35: LINES G0-63
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 21 OF 35: LINES 63-71
```



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ROW 22 OF 35: LINES 72-81
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 23 OF 35: LINES 82-90
|||||||T||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 24 OF 35: LINES 91-100
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 25 OF 35: LINES 100-104
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ROW 26 OF 35: LINES 104-105
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 27 OF 35: LINES 105-107
```



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ROW 28 OF 35: LINES 107-109
```



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ROW 29 OF 35: LINES 109-111
```



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ROW 30 OF 35: LINES 112-114
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
87/01/11 15:23
```

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R6 414 BYTES 60 REGISTERS
ROW 31 OF 35: LINES 114-118
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 32 OF 35: LINES 118-121
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 33 OF 35: LINES 121-129
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 34 OF 35: LINES 129-134
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 35 OF 35: LINES 135-137
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
87/01/11 15:23 (08:16)
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R77 190 BYTES 28 REGISTERS
ROW 1 OF 16: LINES 1-4
```



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ROW 2 OF 16: LINES 4-9
```



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ROW 3 OF 16: LINES 10-14
```



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ROW 4 OF 16: LINES 14-19
```



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ROW 5 OF 16: LINES 19-21
```



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ROW G OF 16: LINES 21-28
```



```
ROW 7 OF 16: LINES 29-31
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 8 OF 16: LINES 31-37
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |||||||||||||||||
ROW }9\mathrm{ OF 16: LINES 38-46
```



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ROW 10 OF 16: LINES 47-55
```



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ROW 11 OF 16: LINES 56-64
|||||||||||||||||||||||||||||||||||||||||||||{|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 12 OF 16: LINES 65-71
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ROW 13 OF 16: LINES 71-74
||||||||||||||||||{|||||||||||||||||||||||||||||||||||||||||{||{|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 14 OF 16: LINES 74-81
```



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ROW 15 OF 16: LINES 82-87
```



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87/01/11 15:36
```

```
R7 190 BYTES 28 REGISTERS
ROW 16 OF 16: LINES 87-91
||||||||||||||||||||||||| |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
87/01/11 15:36 (03:40)
```

R8 91 BYTES 13 REGISTERS
ROW 1 OF 8: LINES 1-4

ROW 2 OF 8: LINES 4-9

ROW 3 OF 8: LINES 10-15

ROW 4 OF 8: LINES 16-20

ROW 5 OF 8: LINES 20-25

ROW 6 OF 8: LINES 26-33

ROW 7 OF 8: LINES 33-38

ROW 8 OF 8: LINES 38-41

$87 / 01 / 11 \quad 15: 40 \quad(01: 46)$

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ROW 1 OF 25: LINES 1-3
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ROW 2 OF 25: LINES 3-8
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ROW 3 OF 25: LINES 8-14

ROW 4 OF 25: LINES 14-19

ROW 5 OF 25: LINES 19-21

ROW 6 OF 25: LINES 21-24

ROW 7 OF 25: LINES 25-29
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 8 OF 25: LINES 29-35

ROW 9 OF 25: LINES 35-36

ROW 10 OF 25: LINES 37-43

ROW 11 OF 25: LINES 43-46

ROW 12 OF 25: LINES 46-49

ROW 13 OF 25: LINES 49-52

ROW 14 OF 25: LINES 52-56

ROW 15 OF 25: LINES 56-58

$87 / 01 / 11 \quad 15: 42$

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SA }299\mathrm{ BYTES 43 REGISTERS
ROW 16 OF 25: LINES 58-61
```



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ROW 17 OF 25: LINES 61-66
||||||||||||||||||||||||||||||||||||||||||||||||||{|||||||||||||{||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 18 OF 25: LINES 66-69
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ROW 19 OF 25: LINES 69-73
|{||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 20 OF 25: LINES 73-76
```



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ROW 21 OF 25: LINES 77-81
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ROW 22 OF 25: LINES 82-84
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ROW 23 OF 25: LINES 84-90
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 24 OF 25: LINES 90-93
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 25 OF 25: LINES 93-97
```



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87/01/11 15:42 (05:47)
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SG 238 BYTES 34 REGISTERS
ROW 1 OF 20: LINES 1-3
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||{||||||||||||||||||||||||||||
ROW 2 OF 20: LINES 3-8
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ROW 3 OF 20: LINES 8-12
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ROW 4 OF 20: LINES 12-14
||||||{|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 5 OF 20: LINES 14-17
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 6 OF 20: LINES 18-23
|{|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 20: LINES 23-29
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 8 OF 20: LINES 29-31
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ROW 9 OF 20: LINES 31-35
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ROW 10 OF 20: LINES 35-41
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ROW 11 OF 20: LINES 42-46
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 12 OF 20: LINES 47-56
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ROW 13 OF 20: LINES 56-60
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ROW 14 OF 20: LINES 60-63
```



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ROW 15 OF 20: LINES 63-67
```



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87/01/11 15:49
```

```
SG 238 BYTES 34 REGISTERS
ROW 16 OF 20: LINES 67-72
```



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ROW 17 OF 20: LINES 73-77
```



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ROW 18 OF 20: LINES 78-82
```



```
ROW 19 OF 20: LINES 83-87
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 20 OF 20: LINES 87-90
```



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87/01/11 15:49 (04:38)
TX 56 BYTES 8 REGISTERS
ROW 1 OF 5: LINES 1-3
```



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ROW 2 OF 5: LINES 3-6
```



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ROW 3 OF 5: LINES 6-9
```



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ROW 4 OF 5: LINES 9-12
```



```
ROW 5 OF 5: LINES 13-15
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
87/01/11 15:58 (01:05)
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WW 140 BYTES 20 REGISTERS
ROW 1 OF 12: LINES 1-3
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 2 OF 12: LINES 3-8
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 3 OF 12: LINES 8-13
```



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ROW 4 OF 12: LINES 14-22
```



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ROW 5 OF 12: LINES 22-28
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||||||||
ROW 6 OF 12: LINES 29-33
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
ROW 7 OF 12: LINES 33-38
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ROW 8 OF 12: LINES 39-42
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ROW 9 OF 12: LINES 43-47
```



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ROW 10 OF 12: LINES 47-50
```



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ROW 11 OF 12: LINES 50-55
```



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ROW 12 OF 12: LINES 55-58
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87/01/11 15:59 (02:40)
```

