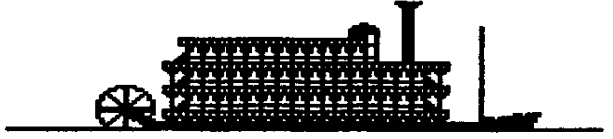


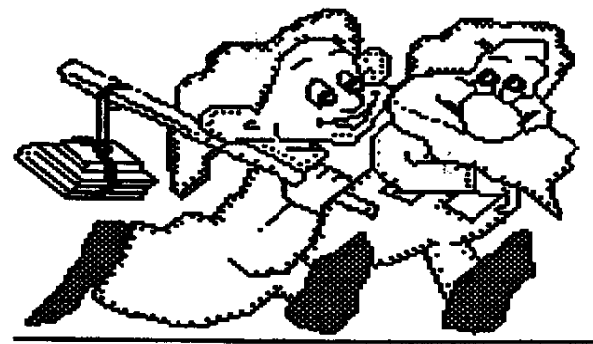
TIDBITS

MID SOUTH 88 USERS GROUP



MEMPHIS TENNESSEE

IT'S OFF TO SCHOOL!

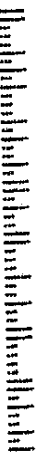
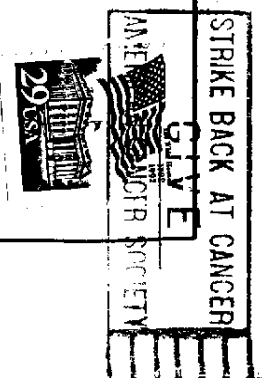
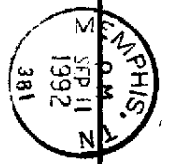


SEPT. 1992

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PRESIDENT'S BIT

----- by Gary W. Cox

I'm very sad to start off by saying that we lost a very long and good member of our group last month, Mac Swope's dad Henry Swope passed away on August 18th. Henry had been a member of the group since as long as I can remember and he frequently showed up at the meetings always enthusiastic about what all was going on. He will certainly be missed and I would like to pass along my deepest sympathy to his family!

I must apologize for not having an article in last month's newsletter. Now days I maintain a very tight schedule of which I am not home very often thus not leaving much time to write anything. It is all that I can do just to photo copy the newsletter, print the labels and mail it. Thus I doubt that I will be running for any significant office in the group next year. Therefore, we need to be searching for someone to take over the duties of photo copying the newsletter, folding, stapling and putting stamps on them, maintaining the group mailing list and getting equipment together for the meetings. After December we will have to have someone to do this in order to keep those services in operation.

On a positive note, plans are in the works for some of us to drive once again to the Chicago TI Faire. The faire is being held in Chicago Illinois Friday October 30th and Saturday October 31st. Beery Miller and myself have already committed ourselves to going and Michael Dorman has indicated he will probably go with us. Several other people have also indicated an interest in going. We will probably have at least 2 rooms reserved (Beery and myself) thus anyone who wants to go can split the room costs with us. If you are interested in going with us (we will be driving) please contact me soon.

There has been some discussion about changing the meeting nights from the third Thursday and to first Thursday of each month. Pending approval from the Red Cross according to their schedule we will be voting on this issue at this month's If you haven't called the 9640 News BBS before or haven't called in a while you are really missing something! The BBS is probably one of the best in the world providing not only access to just the local system but many other systems as well! One of the major areas of the BBS is the "TI ECHO" which is a message area which is shared across the United States and Canada with other BBS's carrying that echo. Messages left in the TI Echo will reach all other systems carrying that message area within a few days. The TI ECHO is also shared with a message area on GENIE where TI ECHO messages are transmitted to GENIE and messages in the special message area on GENIE are transmitted to the TI ECHO. The TI message area on another service called DELPHI are also available on the 9640 News BBS. Besides these national message areas the 9640 News BBS carries a variety of other local and national Echo's including for sale areas and just local TI talk... The file areas are also very large carrying a variety of programs available for downloading. So why not give it a

call today, it won't cost you anything but a phone call which is FREE if you live locally! The number is (901) 368-0112 and the system will now operate at baud rates up to 11,000 baud using the Hayes standard.

C ya at this months meeting....

IN THE NEWS

-----by Gary W. Cox

The purchase of MDOS for the Geneva from Myarc is now complete according to Beary Miller of 9640 News. What this means for the Geneva user and those who contributed to the purchase of the operating system will be improvements made to the system such as problems debugged and the operating system improved. However, as part of the deal, Miller has agreed to send copies of the final MDOS to all registered Geneva owners as determined by Myarc records.

The following edited from Micropendium magazine:

Mike Wright is seeking support for a TI emulator that runs on a PC. This software project is feasible, according to Mike and Barry Traver, who's seen some of the results.

Don Walden of Cecure Electronics, who repairs the Geneva 9640, says he can often help hardware handy Geneva owners do-it-themselves, so they don't have to send their machines in for repair. Cecure Electronics phone is (414) 529-2173.

The Chicago TI International World Faire is scheduled for October 31, to be followed by the Milwaukee Faire November 1st. The Chicago Faire will be preceded by a social mixer from 8pm to midnight October 30th. Admission to the mixer is \$5. Admission to the exhibits and seminars from 9am until 5pm the following day is \$4. A banquet following the event from 7:30 to 9:30pm is priced at \$15. Site for the TI International Worlds Faire is the Holiday Inn Elk Grove, 1000 Busse Rd. (Route 83), Elk Grove Village, Illinois. For further information, contact Hal Shanafield Jr., 2515 March Ave., Evanston IL. (820) 1-1111 (708) 864-8644. Don Walden of the Milwaukee Users Group says the Milwaukee Fair will be at the same location as last year, the Quality Inn Motor Lodge across from the airport. For further information contact Gene Hitz, Milwaukee Area 99/4a Users Group, 4122 North Glenway, Wauwatosa, WI 53222.

Rumors are about on many new products being developed for the TI99/4a and Geneva 9640 including a SCSI interface, and many other hardware projects some of which are expected to be announced at this years Chicago TI Faire.

These are the brief highlights of some of the happenings in the TI world, for a complete overview of what's new and in the works consult MICROPENDIUM. Micropendium is on sale at each meeting or it can be subscribed to for \$25 a year. Their address is MICROPENDIUM, P.O. Box 1343, Round Rock, TX 78680. (512) 255-1512

FROM THE TEACHER'S DESK

----- by Dave Howell
from the Erie 99'er User Group newsletter, June, 1992

ELECTRONIC CATALOG FOR COLLEGES???

Memphis State University (MSU) is using computer technology to produce an innovative guide to the school. It comes on a disk and it's called the MSU Electronic Viewbook with some useful and entertaining features built in. The disk contains information about admissions, financial aid, academic programs, scholarships and other aspects of life at MSU. It is being distributed to guidance counselors in and out of the state. The product even includes an option to print out applications and provides a calculator that lets students estimate the cost of going to school.

The reason for this move? The cost savings are great. Computer disk technology can distribute vast amounts of information for a production cost of only pennies per disk. A general guidance packet of printed material costs about \$15 to produce and mail compared to little more than \$1 for a disk.

Because students have such a brief attention span, a computer program with good graphics and entertaining activities is important. Another option on the program even allows students to print out banners and other materials with MSU's name on them.

EDUCATIONAL SOFTWARE AT HOME- NOT VERY POPULAR!!???

According to a study released by the Software Publishers Association (SPA), "Education and recreational entertainment users average less than five hours per week using their [personal computer]." Most startling, however, is the revelation that much of that software is not exactly bought and paid for!

"While outright purchase is the most often-mentioned method for users to obtain software, a high proportion of users also copy software from friends, at work or school," according to the study. Forty percent of entertainment software users, 26 percent of education software users and 19 percent of personal productivity software users said that they copied software from friends, work or school. Shame on you!

SENIORS "MORE COMPETENT" WITH COMPUTERS

Here's one for us old guys! According to a study by McMaster University researchers in Hamilton Ontario, older adults were rated as "significantly more competent" in the use of computers even though younger adults believe that older adults are less likely to succeed in a computer course and less likely to complete the course than younger adults.

A "PC" THAT YOU WEAR?

NEC is considering a series of computers that can be worn. How about a PC around your neck that not only frees your hands but comes in designer colors as well?

Called "The Wearable Data Terminal," NEC projects its use by inventory managers - worn over the shoulder with a forearm bar code reader. Another version envisioned by NEC is "The Lapbody Computer" to be used by writers who don't have access to a desk. Instead, it hangs from the shoulder and has a keyboard and LCD screen that folds out.

Then there's the computer for emergency medical technicians. This concept would allow them to check patients' vital signs and injuries with a handheld trackball containing an 8-millimeter video camera and sensors. The patient's medical history would be displayed in 2-D, glasses and a built-in comlink would transmit data and video to hospital physicians for consultation.

Admittedly, all this is conjecture at this point. Expect to wait 10 or 15 years for devices like these. However NEC has more immediate plans for these devices.

* A hands-free telephone for skiers by 1993. Walkie-Talkies are already popular on Japan's ski slopes - but other people can listen in.

* A wearable, wireless CD player can be expected in the next few years.

"CHANNEL ONE:" good or bad?

CHANNEL ONE, that 10-minute controversial news program, installed in the Erie Public Schools last Fall, has not recieved a spectacular reception. Although the program has not been evaluated locally yet, a study conducted elsewhere claims the program beaned to high schools does not improve student knowledge of current events greatly. This study was conducted by the University of Michigan's Institute for Social Research and by Interwest Applied Research of Beaverton, Oregon, who were commissioned by Whittle Communications Inc., owner of Channel One.

The study went on to state that even the small observed differences between viewers and non-viewers are "potentially important," and the advantage of viewing Channel One may be greater at "a different point in history." Most students felt they were learning important things from viewing - both about life and about national and world news, but its effect on the measured current events knowledge of the average viewer was quite small.

According to the study, Channel One viewers on average knew more about current events than non-viewers, "but the advantage was small - 3.3 percent on a 30-item test. Students of high academic ability did better - they had a 6 point advantage."

The study found "small positive advantages of 2 to 15 percent" for questions asking where (on an outline map) important events were taking place, and for questions dealing with "non-saturation events," such as news from Poland, the Soviet Union, and South Africa.

A NOTE -----

God made time, but man made haste.

- an Irish proverb -

ANSWER TO THE HOCUS

-----by Mcrton Dworshak
Mid-South 99 Users Group, AUGUST 1992

After reading the Fibonacci Numbers article written by Earl Raguse for the Milwaukee Hocus in September, 1991 and copied for our Tidbits of July of this year, I was reminded of a book I found in our local public library. The book is called Pyramid Power, authored by G. Pat Flanagan, which contains some interesting facts relating to Earl's program, and may satisfy his curiosity about the Fibonacci number series.

It may be only coincidental but there is a number which can be derived from this series which can also be obtained by studying the dimensions of the Great(or Cheops) Pyramid at Gizeh in Egypt.

This pyramid is one of a kind, - no other having the same relative dimensions, and if we draw a line from the apex to the midpoint of one of the four base lines and divide its length by half the length of one of the base lines or edges, the result is a number called the "sacred cut," which is called phi in Flanagan's book. Its value to the fifth decimal place is 1.61803. The square root of this "sacred cut" shows up when we divide the height of the pyramid by half the length of one base line.

This pyramid has five sides(four sides and a base), and it has five points. A pentagram has five points also, and if we draw its diagonals we find that they divide each other forming lines having lengths with a ratio to each other of 1.00000 to 0.61803! Add these and the result is phi!

One of the bases of the great pyramid was lined up to be perpendicular to the true north, and Mr. Flanagan believes that the magnetic north pole and true north were lined up when the pyramid was built, and that there has been a shift in the magnetic pole(which we call magnetic declination). The reason for this belief is that the effects of home-made pyramids on animals and other objects is greatest when the pyramids are lined up with the magnetic north pole. Replicas have been made of different materials such as wood, paper and plastic.

Here are a few other interesting relationships with phi:

$$\begin{aligned} 1/1.61803 &= 0.61803. \quad \text{Phi} = 0.5 + 0.5 * (\text{SQR}(5)) \text{ or } 0.5 * (\text{SQ RT OF } 5) / 2 \\ &\text{and} \\ 3.1416 &= (\text{phi} + 1) * 6 / 5 \end{aligned}$$

Now back to the Fibonacci Numbers. I will show you the first 16 numbers in this series. Starting with the fourth term, each term is found by adding the two immediately preceding terms.

0, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987

If one divides any term by the one just preceding he finds a number that I call A/C. I have altered Earl's program to include this number, and have called it "the cut" in the run of the program. After the 15th term, this "cut" assumes a constant value named the "sacred cut" by the ancients and does not change

thereafter. This constant value is 1.61803(rounded off to the 5th place). In running FIBONACCI2 or FIBONACCI3, the input question, LIMIT? comes up. Any positive number can be entered, and when the run is finished, the last term shown or printed will be equal to or less than this "LIMIT," as entered.

Following are some strange facts about pyramids having the great pyramid's relative dimensions. All of this information was taken from the book entitled "Pyramid Power" by G. Pat Flanagan.

- Food tastes better after exposure in a pyramid.
- Plants grow two to three times faster in a pyramid.
- Cut flowers last longer in pyramid treated water.
- Water is purified in a pyramid.

Cats exposed at intervals under a pyramid are changed from carnivores to vegetarians, desiring fruit and nuts but no meat. Razor blades left under a pyramid remain sharp about 60 times longer than blades not stored under a pyramid.

Dead animals left under pyramids do not decay but are mummified.

"All subjects who practice meditation have reported a significant increase in the effects of meditation in the pyramid. This correlates with the theory that the Great Pyramid was built as a meditation chamber to develop psychic powers."

People sitting long periods under a pyramid lose all sense of time and space. One man who sat under a pyramid for four hours thought that he had been there only a half-hour!

In the King James version of the Bible, we read in II Chronicles 33, the 5th verse, speaking of Manasseh, "And he caused his children to pass through the fire (child sacrifice) in the valley of the son of Hinnom: also he observed times(studied horoscopes) and used enchantments, and used witchcraft, and dealt with a familiar spirit(fortune teller) and with wizards(those who practice magic and fortune telling); he wrought much evil in the sight of the Lord, to provoke him to anger."

So we see that pyramids with the proportions of the Gizeh pyramid are evil. This, I believe, is one of the reasons that God told Moses to lead his people out of Egypt.

Our own country has also turned from God to witchcraft and sacrifice of children to Satan. I believe that God is judging our country, even now.

P.S. The number 1.618 is also employed by certain people who study graphs and charts in the stock market, to determine the timing of repetitive peaks in the Dow average or other economic indicators.

Also, many of the greatest artists in the Renaissance period divided straight lines in segments proportional to 1.000 and 0.618. Earl Raquse, please take note!

There are four programs altogether covering this article, and they are available on disk to anyone wishing copies. Just ask at our club library.

1. HOCUS --this article.
2. FIBONACCI1 --Earl Raquse's original article in the July, '92 Tidbits.
3. FIBONACCI2 --Earl's program altered to give A/C and phi.

4. FIBONACCI3 --The same program as in 3. but for the printer.

P.S. I have found three other series of numbers which when treated as we have the Fibonacci series give phi also. They are as follows:

4,7,11,18,29,47,76,123,199 etc.,

2,4,6,10,16,26,42,68,110, etc.,

and

6,8,14,22,36,58,94,152,246, etc.

There may be more series like these.

FIBONACCI NUMBERS (SUMMATION SERIES)

CHOSEN LIMIT FOR HIGHEST TERM: 100000

TERM	LIMIT	CUT
1	1	1
3	2	2
4	3	1.5
5	5	1.66667
6	8	1.6
7	13	1.625
8	21	1.61538
9	34	1.61905
10	55	1.61765
11	89	1.61818
12	144	1.61798
13	233	1.61806
14	377	1.61803
15	610	1.61804
16	987	1.61803
17	1597	1.61803
18	2584	1.61803
19	4181	1.61803
20	6765	1.61803
21	10946	1.61803
22	17711	1.61803
23	28657	1.61803
24	463668	1.61803
25	75025	1.61803

FIBONACCI4 by Morton Dworshak

```

10 OPEN #1:"PI0"
30 PRINT #1:"FIBONACCI4, AN XB PROGRAM"
35 PRINT #1:
55 PRINT #1:"FIBONACCI NUMBERS(SUMMATION SERIES)"
60 PRINT #1:
110 DISPLAY AT(4,6)ERASE ALL:"FIBONACCI NUMBERS"
115 DISPLAY AT(6,1):"A fibonacci(cut) number is equal
to the sum of its two predecessors, and when divided
by its next smaller term gives"
116 DISPLAY AT(10,6):"the sacred cut after term 15."
130 INPUT " Enter a limit? ":LIMIT
131 PRINT #1:"CHOSEN LIMIT FOR HIGHEST TERM:":LIMIT
132 IF LIMIT<9 THEN 130
133 PRINT #1:
135 CALL CLEAR::PRINT "      TERM ":" LIMIT":" CUT": :
136 PRINT #1:"      TERM ":" LIMIT":" CUT"
140 A=0 :: B=1 :: C=1 :: PRINT TAB(6);1;TAB(14);C
150 FOR X=1 TO LIMIT
170 C=A+B :: IF C>LIMIT THEN 270
180 A=B
190 B=C
195 PRINT TAB(22);INT((C/A)*100000+.5)/100000
196 PRINT #1:TAB(6); X; TAB(15); C; TAB(26); INT((C/A)
*100000+.5) /100000
200 PRINT TAB(6); X; TAB(14); C
210 CALL KEY(3,X,S):: IF S<1 THEN 260
260 NEXT X
270 PRINT :: GOTO 130
    
```

EPSON (Son of "EP")

by John Owen, JSC Users Group (JUG)
from the pages of the Southern Nevada SNUGLETter, July 92

I have always wondered why my MX80 printer got the name "EPSON" when it is made by the SEIKO watch people from Japan. This is the same printer that TI sold under the name of "TI Impact Printer" and IBM sold as the first printer for the IBM PC in 1981.

A recent article in "PC NOVICE" magazine (April '92) gives an in depth story on the Epson printers and explains why it is the industry standard. All printer manufacturers "emulate" the Epson printer codes in some manner. The good dot matrix printer makers are usually 95 to 100% compatible with the equivalent Epson Printers (ie. - 9 pin, 24 pin, color, etc.).

I recently bought a Panasonic KX P2123 Color printer (cost \$289) and use Epson 24 pin Color software drivers to run the machine on my IBM PC. Panasonic does not have any "drivers" out yet for their own machine. I haven't connected it to my TI99/4 yet but know it will work for TI software that has 24 pin color codes in it. I have been using my MX80 for 10 years on my TI and on a PC and it has never failed me (when I took time to learn the printer codes and issued correct codes to the printer). I have screwed up many times but it was always because I was too lazy to read the printer manual (or too dumb to understand it). The last 10 years has been a learning experience and thank God I had the TI99/4 to learn on!!! You just don't learn much about computers by operating a IBM PC. You never have to learn about printer codes or programming.

Back to the story! -

In 1964 the SEIKO watch people built a "Electronic Printer" (EP) TIMER for the Tokyo Olympics. It was the world's first electronic dot matrix printer. In 1968 SEIKO started selling this printer to calculator and cash register manufacturers. In 1975 SEIKO started a company in the USA (Torrance Ca.) to sell these printer components. They named the company "EPSON" (son of EP) following the old Swedish custom of naming their sons after their fathers first name (ie. John's son = Johnson).

In 1978 Centronics built the first dot matrix printer that sold for <\$1000 and established the parallel port interface that is now "standard" on almost all printers. Epson built the TX-80 which had 9 pins and is still in use by some people. In 1979, Epson built the MX-80 and sold it for about \$800. Sales "went thru the roof" and the dot matrix codes standard was established. I payed about \$400 for my MX-80 FT in 1982. All software writers adopted the EPSON codes in order to sell software. Other dot matrix printer manufacturers had to do likewise in order to sell printers. Even TI and IBM chose to put their name plates on the MX-80 rather than build their own printer. Since 1986, Epson printers have been built in Portland, Ore. and are sold worldwide. If you are buying a printer, make sure it is EPSON compatible and you will not have any "insurmountable" problems in making it work with your TI99/4 or IEM PC Clone.

THE RULE OF 78

by George Tilley
from the SNUGLETter, June 1991

A GOOD PROCEDURE CAN BE A SCAM.

The rule of 78 has been around for a long time and is still being used extensively. It provides a standard for computing portions of a contract when the contract is terminated short of the agreed term. If the agreement considers all periods to be of equal weight, all you require is a simple calculation. Half term = half pay, etc, but in most cases one of the parties is entitled to more if the agreement is materially shortened. How much more is often determined by how much of the contract was fulfilled. Any differential should decrease as the contract gets closer to term. Using the rule of 78 is an excellent way to accomplish this for a short term involving fairly small amounts. I am highly suspicious of any agreement using the rule of 78 if the term is longer than about three years (preferably less) and involves more than a few hundred dollars. Businesses that perpetuate the practice for long terms involving thousands of dollars are ripping off their customers. Their scam is probably not illegal (it should be) and if you get taken in you'll probably get clobbered with "caveat emptor" and left to lick your wounds. You should know the procedure and never get involved if you consider the settlement provisions to be out of line.

The rule of 78 is sometimes mistakenly considered in the same category as the "rules of thumb" that approximate answers. An example would be the rule of 72 which allows a good guess of the time required to double an investment i.e. 72/interest rate = time required to double. An investment at 12% will double in 6 years (72 / 12), 9% in 8 years and 36% in 2 years. Actually, 6% will yield 2.0122 in 12 years, 12% gives 1.9738 in 6 yrs and 36% only 1.45 in 2 yrs, so don't bet the farm on the rule of 72.

sun of the digits (sd)

formula :	$sd = \text{high} \# + (\text{high} \# + 1) / 2$
example :	$sd1 : 6 = 6 * 7 / 2 = 21$

for series not starting with 1	
formula =	$(sd1 : \text{high}\#) - (sd1 : \text{low}\# - 1)$
example :	$sd4 : 6 = (sd1 : 6) - (sd1 : 3) = 15$

The rule of 78 is a precise procedure that is based on the sum of the digits (sd) so we'll take a look at that first. I assume the 78 comes from the fact that the sum of the digits for the 12 months in a year is 78. The formulae for sum of the digits only pertain to sequences starting with #1. *hint-* anytime you add one to a number, one of the two is an even number. Divide that number by 2 before you multiply. Example: 1 + 2 + 3 + 4 + 5 + 6 = 21 or $5 * (6+1) / 2 = 21$ or $(6/2) * 7 =$

21. If that makes you feel a little dumb because it is too simple, compute the sum of the digits for 15 yrs with monthly periods. The $12 * 15 = 180$ is easy enough. From there you can go the long route ($180 * 101/2$) or you can do $90 * 181$ in your head and probably get bonus points for doing it. (16,290 - via my calculator. You smart ones can trust your head). ok OK - so we all know sd.

proration of the rule of 78

per	wgt	share	prorata
1	5	5/15	5/15
2	4	4/15	9/15
3	3	3/15	12/15
4	2	2/15	14/15
5	1	1/15	15/15

15	15	(col 2 & 3 = sd)	

Proration is accomplished by numbering the periods, applying those numbers inversely and dividing by the sd as shown in the chart to the right. If the five periods had equal value the periodic divisions would be 20,40,60,80,100% -- By the rule they are 33.3, 60, 80, 93.3, 100%. Most insurance companies follow this procedure when they compute premiums for cancelled policies. If you pay for a one year policy and cancel after two months, you will pay 29.487% $((12 + 11) / 78)$ of the yearly premium for 16.667% of the year. I think this demonstrates excellent use of the procedure. You contracted for a year - the company probably paid a sales commission and went to the expense of setting up the account. The company probably doesn't even sell a two months policy. I believe the proration is about as fair as you can get for this situation.

In actual practice, the above example is computed in a little different way but gives the same result. The best examples involve a situation when principal and interest are involved. Principal can be an amount charged or loaned and the interest is for the full term of the loan. (payment * number of payments, in other words). All of the principal must be repaid, of course, so only the interest is prorated. They compute the "unearned interest" rather than the "earned" and subtract this plus your payments to determine the payoff. Pretty neat, huh?

Here's an example using a principal of \$10,000 with an interest rate of 12% to be repaid with twelve monthly payments of \$888.49. Twelve payments total \$10,661.88. Subtracting the principal tells us we'll pay \$661.88 in interest - This is considerably less than 12% of the principal because it is figured on a declining balance basis. A payoff after two months for the declining balance loan would be \$8,415.14. Under the rule of 78, \$8,418.21. The two are pretty close - short terms - only \$3.07 difference.

78's payoff was computed by subtracting the two payments made and the "unearned interest" from the total amount due in payments for the full term of the loan. Unearned interest is

the sum of the digits for the remaining periods (1 thru 10) divided by sd for the full term (1 thru 12) multiplied by the total interest that would have been paid if the loan went to term, i.e. (sd1 : 10) / (sd1 : 12) * \$661.85 = \$466.69.

-- longer terms and higher rates make a much different story --

The tables that follow are based on an interest rate of 10% or 15% monthly. This rate shows how "the rule" affects your payoff balance a little better than a lower rate and 10% is not all that uncommon. Not long ago, credit cards, finance companies and real estate loans were all in that range . . . (some still are). Seven terms are listed with a low of 1 yr to a high of 15 yrs. The periods are monthly making the number of periods (npr) range from 12 to 180. The principal is \$10,000. If you check some of these computations we may differ from a few cents to a dollar or two since I did these on a spreadsheet and did not round to the penny i.e. the spreadsheet might use \$915.799 as the pmt figure instead of \$916.00. Any small differences will not affect our conclusions.

The first table shows the payments and total interest for the terms indicated. The most interesting thing here is the amount of interest you pay over a period of years.

\$10,000 LOAN AT 10% REPAID MONTHLY

years	nper	pmt	tot int(term)
1	12	\$916.80	\$1,001.60
3	36	\$361.52	\$3,014.86
5	60	\$253.93	\$5,236.06
7	84	\$219.18	\$7,654.98
10	120	\$180.19	\$11,622.22
12	144	\$169.91	\$14,467.32
15	180	\$161.04	\$18,907.58

Choosing the 15 yr term commits you to payments that total almost three times the amount you borrowed. Steve Gattler took a look at this when he dropped by last Sunday and decided he wanted to be the lender rather than the borrower - good choice - The difference between 10 and 15 yrs is worth a look. Pay \$19.15 more for ten years (\$2,296 total) and pay \$7,365.36 less interest.

Our real purpose here is to show the difference between payoffs for the two types of loans. The next table shows that at 1/6 of the full term. That's the end of two months for the 1yr loan and 2.5 years for the 15 yr loan.

PAYOFF STATUS AT FRACTIONALS TERMS

term	per%	1/6 term		
		refund 78	payoff 78	payoff std
1yr	2	\$ 706.26	\$8,461.74	\$8,454.90
3yr	6	\$2,104.97	\$8,740.75	\$8,682.30

5yr	10	\$3,640.07	\$9,048.64	\$8,887.62
7yr	14	\$5,328.47	\$9,384.02	\$9,070.22
10yr	20	\$8,084.33	\$9,934.19	\$9,302.01
12yr	24	\$10,060.61	\$10,328.83	\$9,429.85
15yr	30	\$13,200.39	\$10,955.93	\$9,585.49

Note the difference for the 1yr loan is \$6.84 at the 10% rate. At 12% our difference was just \$3.07. Increasing the interest rate 50% increases the difference 222.8%. The difference is still not outrageous, but look at the 12yr term. After making 24 payments of \$169.91 it will still cost \$328.43 more than you borrowed to pay off the note.

Payoffs at 1/4 term are a little more common. At this point only the 12 and 15 year loans have payoffs greater than the original principal however, the differences become significant. Payoffs for the declining balance loans are less than the principal from the first payment on.

PAYOFF STATUS AT FRACTIONALS TERMS

term	per%	1/4 term		
		refund 78	payoff 78	payoff std
1yr	3	\$ 577.85	\$7,673.35	\$7,664.92
3yr	9	\$1,711.14	\$8,050.01	\$7,997.97
5yr	15	\$2,961.38	\$8,465.67	\$8,266.15
7yr	21	\$4,322.01	\$8,910.42	\$8,527.40
10yr	30	\$6,555.51	\$9,661.16	\$8,866.89
12yr	36	\$8,156.58	\$10,193.91	\$9,058.64
15yr	45	\$10,700.18	\$11,040.50	\$9,297.57

At the 1/3 term point the differences for the longer terms are truly ridiculous. Lending institutions that employ the rule of 78 under these conditions are highly suspect.

PAYOFF STATUS AT FRACTIONALS TERMS

term	per%	1/3 term		
		refund 78	payoff 78	payoff std
1yr	4	\$ 462.28	\$6,872.12	\$6,863.10
3yr	12	\$1,354.05	\$7,318.53	\$7,241.47
5yr	20	\$2,346.21	\$7,811.16	\$7,596.66
7yr	28	\$3,422.23	\$8,347.76	\$7,924.96
10yr	40	\$5,186.78	\$9,228.04	\$8,361.91
12yr	48	\$6,452.09	\$9,859.45	\$8,614.82
15yr	60	\$8,462.24	\$10,862.82	\$8,937.59

After paying on the 15 yr loan for five years the payoff is still \$862.82 more than the original principal.

If you confront the institutions that perpetuate this scam, they will volunteer no information and be very evasive. Don't let them get away with it. Make them change or go out of business. They deserve worse.

SAY WHAT ???

----- by Tom Knapp
from the St. Louis 99er, COMPUTER BRIDGE, October 1989

"This resume certainly has a professional look, what computer program did you write it on?", a personal manager recently asked me. My reply, "TI Writer with a NLQ printer". "I don't think I've come across that program before. Do you recommend it for my clone. I only have 512K of memory" she said. I couldn't help but laugh at her expression as I explained that I only had 48K of memory and that the computer and the program were both at least eight years old. She was of course flabbergasted by this as she lives only in the IBM world where 256K is disdained and 1meg of ram is common. Her first reaction was that I was talking about a dedicated word processing machine, and she became increasingly incredulous as I attempted to fill her in on some personal computer history.

Yes Virginia there were other personal computers other than Apple before Big Blue entered the field. And yes they were (and still are) REAL COMPUTERS. Sixteen bit processor did not start when Intel and IBM got into the game. Once upon a time there was a small computer made by a Texas company with the best double E's in the business. Their computer was hawked on television and in magazines as the HOME computer by a well known comedian. An excellent unit it was (and is) but poorly marketed. Those of us who looked for the most advanced computer at that time quickly came to the conclusion that this was it. We were right at the time but lacked the prognosticating talent to see the future of the computer market. When Big Blue entered the market with a poorly designed computer with a worse operating system who knew that mediocrity would become the standard instead of excellence. Shows what the power of marketing and a big name can do.

Undaunted we stayed with our little computer and have found that TI was right all along. In today's world the 99/4A belongs in the HOME. In my home it serves all the functions required of it, word processing, financial help, game machine, newsletter publishing, education and some use as a data base. In 1990 the TI will still be around, still amazing IBM people with what you can do with 48K and still fulfilling our computer needs. The only reason I can find to add an IBM clone to our home is for business use and only for compatibility reasons. For home uses the TI should continue to serve us for years to come.

A NOTE-----

Whoever thinks marriage is a 50 - 50 proposition doesn't know the half of it.

- Franklin P. Jones

QUOTES FROM THE PAST

----- by Gene Bohot
from the pages of the Milwaukee newsletter, Feb. 1992
-INSTALLMENT ONE-

(Ed: Just one the goodies on the disk sent to me by Gene. I remember reading these quotes in the Pomona Newsletter, and thinking, "How in the world did Gene get the time to do all this reading?" When I went to college, I had to read so much stuff that the professors wanted me to read, that I didn't have time to read anything else. My hat goes off to Gene.)

I thought this would be appropriate for the first issue of the new year and a new decade. - Gene Bohot -

"What can be palpably more absurd than the prospect held out of locomotives travelling twice as fast as stagecoaches?"

The Quarterly Review, 1825

"The ordinary 'horseless carriage' is at present a luxury for the wealthy; and although its price will probably fall in the future, it will never, of course, come into as common a use as the bicycle."

The Literary Digest, Oct. 10, 1889

"There is no plea which will justify the use of high tension and alternating currents, either in a scientific or a commercial sense."

Thomas A. Edison, 1889

"I must confess that my imagination, in spite of spurring, refuses to see any sort of submarine doing anything but suffocating its crew and floundering at sea."

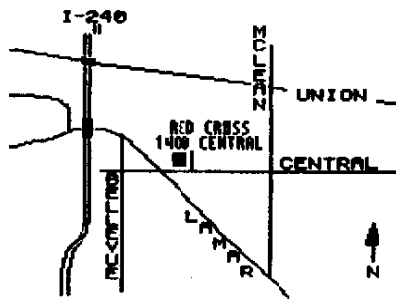
H. G. Wells, In Anticipation, 1901

"The actual building of roads devoted to motor cars is not for the near future, in spite of many rumors to that effect."

Harper's Weekly, Aug. 1902

"We hope that Professor Langley will not put his substantial greatness as a scientist in further peril by continuing to waste his time, and the money involved, in further airship experiments. Life is short, and he is capable of services to humanity incomparably greater than can be expected to result from trying to fly ..."

The New York Times, Dec. 10, 1903



LOCATION MAP

WORKSHOP : to be announced.

PROGRAM BIT - third Thursday
SEPTEMBER 17th , 1992

MEETING: 7:00pm - Red Cross Building - 1400 Central.

6:45pm - Doors Open

7:00pm - Meeting begins, library open.

7:30pm - Demonstration of various products.

9:30pm - Meeting ends.

9:45pm - Late dinner at Shoney's on Union Ave.

NOTICE

Information contained in Tidbits is accurate and true to the best of our knowledge. Viewpoints and opinions expressed in Tidbits are not necessarily that of the Mid-South 99'ers. We welcome any opinions/corrections from our readers. Articles may be reprinted elsewhere as long as credit is given to the author and newsletter.

GROUP INFO

Visitors and potential members may receive 2 free issues of Tidbits while they decide if they wish to join (no obligation) On the top of your label is a code. A Y means you are a member, W means 2 free list, UG means user group and B means a business. Beside the Y is a date, one year from that date your dues are due. A dollar sign (\$) on the label will indicate that your dues are due. The library is open only to members. Library list is \$1. Mail order disk library access is \$2 for the first disk and \$1 for each additional disk - max of 5 disks per month. Order by disk number only. At meetings, library access is FREE if you exchange your disk for ours or \$1 per disk for our disks. Send all mail order library requests to librarian's address! Send dues and correspondence to group address.

CALENDAR

MEETINGS: SEP. 17 OCT. 15, (3rd Thursday!)

WORKSHOPS: TO BE ANNOUNCED

24HR TI BULLETIN BOARD

The 9640 NEWS BBS 300/1200/2400/4800/7200/9600/12000/14400
 Hayes. 901-368-0112

GROUP MAILING ADDRESS

Mid-South 99 Users Group
 P.O. Box 38522
 Germantown, Tn. 38183-0522

LIBRARY ADDRESS

Jim Saenenes
 45 Higgins Road
 Brighton, Tn., 38011

MEMBERSHIP APPLICATION

NAME _____ \$18.00 FAMILY
 ADDRESS _____
 CITY _____ ST _____ ZIP _____
 PHONE(____) _____ : INTERESTS _____
 EQUIPMENT, ETC. _____

Detach and mail with check payable to: Mid-South 99 Users Group,
 P.O. Box 38522, Germantown, Tn, 38183-0522.