

A CHILD'S FIRST LOOK AT MULTIPLICATION

by Tony Falco

"Dad, today I heard someone talk about three times four. What does that mean?"

"Get that jar of pennies in your room and I'll try to show you. Three times four means three fours. Make a row of four pennies. Now two more rows like that one. That's four plus four plus four or twelve. You can see that it is also four rows of three each. Four times three is the same as three times four. Hey, we could do this on the computer."

The program listed below grew out of a conversation much like the one above. I strongly believe that understanding numerical concepts at all levels is aided by, or maybe even only possible with, a physical or mental picture that gives the learner a comfortable and familiar feeling. With this in mind, I try to help my child build a conceptual basis for ideas that tend to become rote with time. With a program that is conceptually sound, the computer's infinite patience provides an ideal means for acquiring insight into basic numerical concepts.

To use the program you pick the highest factor the child is to work with. For example, for products up to 6×6 or 36 pick 6. The program randomly picks problems and displays the problem with an array of asterisks to show the factors to be multiplied. The user types an answer. If wrong he tries again until correct. The format in which the array appears on the screen encourages the child to try repeated additions or, as a last resort, counting. To end the program enter <Q> instead of an answer. The interaction between computer and learner is reinforced with speech. I feel this makes a program more friendly and familiar. The TI-99/4A has been, and continues to be, the only machine for inexpensive, high quality and easy to use speech.

```
10 FOR S=1 TO 14 :: CALL COL
OR(S,2,12):: NEXT S
20 CALL SCREEN(12):: CALL CO
LOR(2,2,16):: CALL CLEAR
30 INPUT " HIGHEST FACTOR=>
":H
40 RANDOMIZE :: CALL CLEAR
50 A=INT(H*RND)+1 :: B=INT(H
*RND)+1
60 IF A*B>H*H THEN 50
70 P*=STR$(A)&"x"&STR$(B)&"=
" :: DISPLAY AT(5,12):P$
80 S*=RPT$(" ",B)
90 FOR T=1 TO A
100 DISPLAY AT(T+7,14-LEN(S*
)/2):S$ :: NEXT T
110 K=12-LEN(S*):/2+(A>9)
120 DISPLAY AT(B+INT(A/2),K)
SIZE(-2):STR$(A)
130 DISPLAY AT(9+A,13):B
140 ACCEPT AT(5,12+LEN(P*))B
EEP:ANS$
150 IF ANS$="Q" OR ANS$="q"
THEN 180
160 IF VAL(ANS$)=A*B THEN R=
R+1 :: CALL SAY("GOOD"):: GO
TO 40
170 CALL SAY("SORRY TRY AGAI
N"):: W=W+1 :: GOTO 140
180 CALL CLEAR :: PRINT ::::
::: PCT=INT(100*R/(R+W)+.5)
190 PRINT " ";W+R;"TRIED"
200 PRINT " ";R;"CORRECT"
210 PRINT " ";PCT;"%"
220 CALL SAY("GOOD BYE")
230 END
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 * TI HARDWARE & SOFTWARE SUPPLIERS *

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 Retyped for Bits & Bytes by Bill Schult

Below is a list of known TI hardware and software suppliers that came to me via BAYOU BYTE, APRIL 1987 edition. This is NOT an endorsement of these companies but a list for the convenience of our members.

AMNION HELPLINE
 116 CARL STREET
 SAN FRANCISCO, CA 94117
 (415) 753-5581

PILGRIM'S PRIDE
 P.O. BOX 2
 MATBORO, PA 19040
 (215) 441-4262

ASGARD SOFTWARE
 P.O. BOX 10306
 ROCKVILLE MD. 20850
 (301) 345-2492

QUALITY 99 SOFTWARE
 1884 COLUMBIA RD. #1021
 WASHINGTON, DC 20009
 (202) 667-3574

DATABIOTICS INC.
 P.O. BOX 1194
 PALOS VERDES ESTATES, CA 90274

RAVE 99 CO.
 23 FLORENCE RD.
 BLOOMFIELD, CT. 06002
 (203) 242-4012

DISK ONLY SOFTWARE
 P.O. BOX 4170
 ROCKVILLE, MD. 20850
 TOUCHTONE ORDER LINE:
 (800) 446-4462 +897335(AT TONE)
 ALTERNATE ORDER LINE:
 (301) 340-7179
 OR FOR INFO. ONLY:
 (301) 340-7179

RYTE DATA
 210 MOUNTAIN ST.
 HALIBURTON, ONTARIO, CANADA
 KOM 1SO

GREAT LAKE SOFTWARE
 804 E. GRAND RIVER AVE.
 HOWELL, MI. 48843

TENEX COMPUTER EXPRESS
 P.O. BOX 6578
 SOUTH BEND, IN 46660
 (800) 348-2778- ORDER LINE
 (219) 259-7053- ORDER STATUS
 (219) 259-7051- GENERAL INFO

HAC LABS LTD.
 HELENE M LABONVILLE
 121 CAMELOT DRIVE RFD5
 BEDFORD, NH 03102
 (603) 472-3369

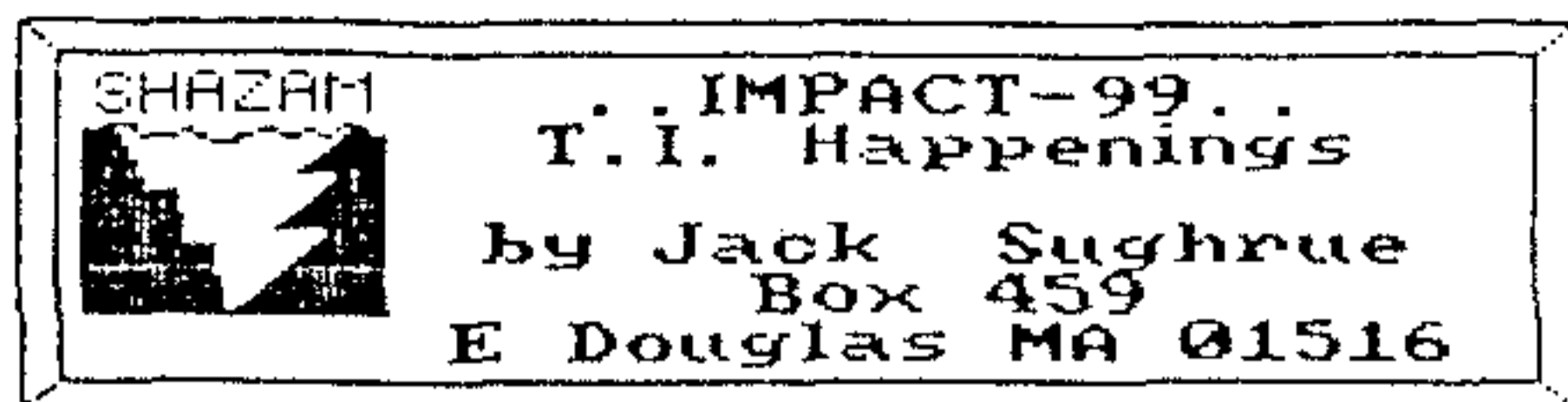
TEX-COMP
 P.O. BOX 33084
 GRANADA HILLS, CA 91344
 (818) 366-6631

MG (MILLERS GRAPHICS)
 1475 W. CYPRESS AVE.
 SAN DIMAS, CA 91773
 (714) 599-1431

TRITION PRODUCTS CO.
 P.O. BOX 8123
 SAN FRANCISCO, CA 94128
 (800) 227-6900

MIKE LAPUSAN
 3429 PESTALOZZI
 ST. LOUIS, MO. 63118
 (314) 772-2470

GATEWAY ELECTRONICS
 8123 PAGE
 ST LOUIS, MO
 (314) 427-6116



GOOD OLD DAYS ARE COMING BACK!

Remember those good old days of 1982-84 when there were loads of books and magazines for us TIers? When we could buy text materials for our computer faster than we could read and use them?

Methinks these days may be returning. At least a little.

At recent fairs and meetings I've attended there has been lots of talk about the disappearing textware in the TI World Community. No more books. No more magazines. No more...

Actually, there is more good, intelligent, useful TI stuff being written for textware today than there was four or five years ago. It's just that most of it is being written by users in user groups, not by some writer in an ivory tower somewhere. Most of these new writings are free (in newsletters with membership or in exchanges with other groups) and readily available.

Someday, I'd love to publish a list of my favorite dozen newsletters worldwide, but then the IMPACT column may be reduced to only 12 publications.

So much for that idea.

Joining a user group, even by mail if there aren't any nearby, may be the most sensible investment a 99er could make.

However, there are still lots of other sources for textware in our fellowship.

COMPUTER SHOPPER (\$21 for 12 monthly issues) P.O. Box 1419, Titusville, FL 32781-9988. This 10 X 14 500-plus page giant is probably the best single source for inexpensive disks, drives, cables, monitors, printers, what-have-you. It also has a listing of user groups (Check to see if yours is there.) and a TI classified section. But the reason most of us subscribe is the TI FORUM written by Ron Albright and John Zittrain. These two guys have a folksy approach to the realm of TI computing. Their monthly articles are full of wit and information and lots of heady reviews and predictions.

MICROpendium (\$20 for 12 monthly issues) P.O. Box 1343, Round Rock, TX 78680. This is the best magazine source for all TI owners, from super techie all the way down the ladder to people like myself. The 40-page newspaper periodical is totally devoted to the TI world and is as up-to-date as one can get. If you can only

afford one TI magazine, this is probably the one. (John Zittrain, Ron Albright, Barry Traver, Chris Bobbitt, and Bruce Forbes are probably going to kill me for saying that.)

ASGARD NEWS (\$6 for 4 quarterly issues) P.O. Box 10306, Rockville, MD 20850. Though this magazine is fairly new, the editor - Chris Bobbitt - has been programming and writing steadily for the TI community since his teenage years. So it's a natural step up to see a full-fledged magazine come out. Most of the first issue was devoted to previews of coming attractions and reviews of many of Asgard's products. Each issue, though, has an extended article (the 9640 vs the 99/8, for example) and editorials and regular columns and corners. Lots of small, helpful hints and comments are given on a variety of TI subjects.

Genial TRAVELER (\$36 for a one-year, six-disk subscription; \$65 for a two-year subscription. These subscriptions also have bonuses.) 835 Green Valley Drive, Philadelphia, PA 19128. In a way Barry Traver's diskazines are not strictly a hardcopy magazine, but the DV/80 files dumped will give you the equivalent of a novel. To be a 99er with a disk drive and not have this service is to live a deprived life. These are packed! Really packed disks of an incredible variety of things for the TI: music, utilities, games, wordprocessing, everything else. Far less than a penny a sector, these disks may be ordered as Volume One (the set already complete), Volume Two (still some to come), or both. I would recommend Volume One first.

All of the above you may already own or at least know about. But there is another text/disk setup out there that is really worth discovering. It's been around since September of '87, and it is another large value for we 99ers, though it just hasn't gotten the attention many other TI efforts have gotten.

TId Bits is a bimonthly magazine for only \$8 (6 issues) for hardcopy or \$12 (6 issues) for disk (SSSD floppy). The disk contains lots of additional PD and Fairware stuff to extend to two sides. The magazine contains photos and graphics.

Mail to Bruce Forbes, editor; Route 2, Box 412; Sumnerduck, VA 22742.

It may be hard to make a decision about which version to get - disk or text. Although the disk contains the exact text of the hardcopy (and a lot of other surprise goodies besides), I personally am partial to the hardcopy for a number of reasons.

TId Bits pilot issue contained some screen photos, graphics of an envelope cataloguer, and a screen graphic to go along with a program printed out.

The next issues, however, contained some of the best photographs I have ever seen of the internal structure of our computer. The text talks about chip replacements and

gives some very precise, easy-to-follow photographs and enlargements that make the process very logical, very clear, and - even to a non-techie like myself - very unfrighteningly practical.

It's one thing to see drawings (which are also in the magazine), but it's quite another to have step-by-step photographs of the entire process.

These magazines are jam-packed with all kinds of stuff that you don't find in MICROpendium, ASGARD NEWS, or - because of the nature of the zine - Genial TRAVELER.

Bruce supplies the reader with all kinds of inside information on a large variety of things for us 99ers. Lots of prices of things. Lots of addresses. Lots of reviews. Lots of programs.

It's a one-man operation at this point, and each issue gets better and better.

Bruce has promised to continue this magazine through at least one year's subscription. And hardcopies of all past issues will be available through 1988 with each subscription. The disk versions will continue to be available, I assume, for a long time to come. Newsletter editors may be interested in getting this version for an excellent source of some interesting material.

Bruce says of his excellent efforts, "A lot of thought went into the pricing of Tid Bits. We were keeping in mind that the TI community has been shafted too many times. Therefore, we set a break-even factor projected to December 1988. If we should pick up a sponsor or advertiser throughout the year, those funds would be used to lure a TI Brain to produce unique articles for us." [I'm available, Bruce.]

"We are committed to 1988 and are cautiously optimistically looking to 1989. If the world doesn't end or the TI community completely collapse we project some kind of survival into 1989 and beyond."

Hooray!

Writers and programmers and techies and non-techies, take note! Here is a good source for you to get those articles and designs and comic strips published.

Readers, here is another great TI source that needs

all our support. For only \$8 we could be supporting our own futures with our fabulous machines.

Good luck, Bruce!

HELPFUL HINT OF THE MONTH

This has to do with TI WRITER (or any version: FUNNELWEB, BA WRITER, whatever).

Did you know you can type anything you want after a carriage return ON THE SAME LINE and it won't print out. But it'll SAVE. This is great for text notes for screen reading. I've used this a lot, particularly when I'm writing articles or poems. Very handy.

Also handy is the space use in LF and SF.

When you LF and there is already a DSK2.HEMENWAY up there on auto and you want to load DSK2.KONG, all you have to do is type the KONG and press the Spacebar and Enter, even though it'll say DSK2.KONG WAY on the screen. Actually, you can even SAVE a file with a long (up to 80-col) note after a filename and space. This will disk SAVE and screen read but not print out. Lots of handy reasons for this on working disks.

Another handy-dandy is letter saving. If you write as many letters as I do (between 30 and 40 a week), it's a good idea to let your FUNNELWEB do the sorting and hard work for you. Just name the letter by date and name in the following way. If I write to Jim Peterson on May 17 I would SAVE the file as DSK2.517JIMPETE. Always month first (5) followed by day (17) and the name as far as it'll go. So if I wrote to Jim on November 27 it would be 1127JIMPET, but if I wrote on April Fool's Day it would be 41JIMPETER. This is also handy if you write a lot of letters on the same day, as TI WRITER will sort them for cataloguing first by number then by letter. So they will be numerically AND alphabetically sorted in the catalog.

Have any handy-dandys of your own (or ones you've come across)? Send them along. I'll be happy to IMPACT them for you, with full credit, of course.

AUGUST 9, 1988 / IN OUR NEW CLUBHOUSE!

MUNCH OFFICERS AND NUMBERS (all in 617 area)

President/Mail W.C. Wyman 839-4134
Vice President
Secretary Al Cecchini
Treasurer Jim Cox 869-2704
Temporary Editor Jack Sughrue
Adv Prog. Chair Dan Rogers 248-5502
Library Al/Lisa Cecchini
Disk Librarian
Tape Librarian Walter Nowak
Newsletter Lib.
BBS Service

LIBRARY NOTICE

PLEASE RETURN ANY ITEMS BORROWED FROM OUR LIBRARY. We are still missing a considerable number of books, tapes, disks, and so on belonging to YOUR CLUB. Do a little clearing around your computer area (or any places you'd be apt to set things aside). If you locate any library materials (or if you'd like to donate any you no longer use) please come with them to the next meeting. We don't care how long you've had them out. There is no fine. But it would be FINE if other members could have a chance to borrow these things. Godzilla is watching you!

ADVERTISING RATES:

Double Page (10.5" by 8") \$25.00 per insertion
Full Page (5" by 8") \$13.00 per insertion
Half Page (5" by 4") \$ 7.00 per insertion
Quarter Page (5" by 2" or
(2.5" by 4") \$ 5.00 per insertion
Classified (non-commercial) ads are FREE for MUNCH members.

... RAFFLE ...

Every month we have this peachy-keen raffle of all kinds of neat stuff given by our generous members and friends. All kinds of software and sometimes hardware are given away free each meeting. The dollar donation helps to defray some of the costs of our monthly rent at the clubhouse, so all members who participate help a lot. Donations are happily accepted. Remember: YOU MUST BE PRESENT TO WIN!

AUGUST SALE

Another chance to sell any used consoles, P/Boxes, cards, tape recorders, interface cables, ANYTHING related to your computer system. Also bring any original tapes, cartridges, disks, texts, or other soft/textware. Be prepared to buy a lot and sell a lot. Please come with prices marked on the items.

NEWSLETTER

BECOME IMMORTAL! We are looking for articles, cartoons, love letters, programs, lists, old banana peels; in short, anything from the members which can be printed in our newsletter. Text items preferred on SSSD disk through TIW. Printed items also accepted. Share your interest or expertise with other members.

NEWSALS + RENEWALS

NEWSALS are \$15/year plus a one-time \$10 initiation fee (which includes a choice of ANY club disk free); RENEWALS are \$15/year. Members have full use of disk/text libraries, free workshops + assistance, 12 full issues of M.U.N.C.H., voting privileges + more! Subscription alone is \$10/year. Mail check to address on cover.

EDITOR NEEDED

BEGINNING WITH THE OCTOBER ISSUE OF M.U.N.C.H. A NEW EDITOR WILL BE NEEDED FOR THIS NEWSLETTER. IF YOU HAVEN'T YET HAD A CHANCE TO EDIT THIS PERIODICAL AND WOULD LIKE TO, PLEASE LET CORSON KNOW.

