VIDEO MATH FLASH CARDS

LEARNING

Two-minute, one player math drills
(ages 6-10)

by Richard S. Waller

Requires: ATARI BASIC Language Cartridge

Cassette version (3):	ATARI 410 Program Recorder
(APX–10048)	16K RAM
Diskette version (2):	ATARI 810 Disk Drive
(APX–20048)	24K RAM

Edition D

CONSUMER-WRITTEN PROGRAMS FOR

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Distributed By

The ATARI Program Exchange
P.O. Box 3705
Santa Clara, CA 95055

To request an APX Product Catalog. write to the address above. or call toll-free:

800/538-1862 (outside California)
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Introduction

OVERVIEW

VIDEO MATH FLASH CARDS was designed to allow children to practice for timed arithmetic tests commonly given in school. With VIDEO MATH FLASH CARDS, kids can practice addition, subtraction, multiplication, division, or all four kinds of problems by answering the problems that flash on the TV screen in large numbers. These problems are just like those printed on regular flash cards that provide drills for single-digit problems or answers.

The child tries to answer as many problems correctly as he or she can within either two or three minutes. The program counts the number of right and wrong answers, and displays a rank, such as MATH WIZ, based on how well the child did. Any problems answered incorrectly display again during a review stage, providing additional practice. The rankings and sounds in VIDEO MATH FLASH CARDS give it video game features while maintaining the same performance standards as at school.

Version 2 lets the child set a limit on the difficulty of problems the program displays. The beginner's version gives three minutes of practice, and the advanced version offers two-minute drills, with emphasis on speed.

HAVE FUN!

REQUIRED ACCESSORIES

ATARI BASIC Language Cartridge

Cassette version

16K RAM
ATARI 410 Program Recorder

For diskette version

24K RAM
ATARI 810 Disk Drive

CONTACTING THE AUTHOR

Users wishing to contact the author about VIDEO MATH FLASH
CARDS may write to him at:

6703 Donna Rae
Seven Hills, Ohio 44131

Getting started

LOADING VIDEO MATH FLASH CARDS INTO COMPUTER MEMORY

1. Insert the ATARI BASIC Language Cartridge in the cartridge slot of your computer.

2. If you have the cassette version of VIDEO MATH FLASH CARDS:

a. Have your computer turned OFF.

b. Turn on your TV set.

c. Slide the VIDEO MATH FLASH CARDS cassette in the program recorder's cassette holder and press REWIND on the recorder until the tape rewinds completely. Then press PLAY.

d. While holding the START key down, turn on your computer.

e. When you hear a beep, release the START key and press the RETURN key. The program will load into computer memory and start automatically.

If you have the diskette version of VIDEO MATH FLASH CARDS:

    a. Have your computer turned OFF.

    b. Turn on your disk drive.

    c. When the BUSY light goes out, open the disk drive door and insert the VIDEO MATH FLASH CARDS diskette with the label in the lower right-hand corner nearest to you.

    d. Turn on your computer and TV set. The program will load into computer memory and start automatically.

THE FIRST DISPLAY SCREEN

    When VIDEO MATH FLASH CARDS finishes loading into computer memory, the title and copyright information display:

<div align="center">

VIDEO MATH

FLASH CARDS

COPYRIGHT 1982

RICHARD S. WALLER

</div>

Then the information displays for selecting the kind of drill to be used. VIDEO MATH FLASH CARDS has two versions—a beginner's version and an advanced user's version. Each version has a screen of selections. Descriptions of these screens follow. You can display either screen by pressing the OPTION key.

THE BEGINNER'S VERSION

The beginner's screen looks like this:

```
VIDEO MATH FLASH CARDS
A 3 minute challenge for BEGINNERS
press OPTION for advanced

Push START for >>   + PLUS (ADDITION)
                    - MINUS (SUBTRACT)
                    MIX + AND -
                    ADDING IN    0-9 ORDER
                    MULTIPLY IN 0-9 ORDER
                    MULTIPLY TO 5 X 5
                    TYPE IN NEW LIMIT
LARGEST SUM FOR PLUS OR MINUS IS 9
Press SELECT key to change practice

To practice a number
Press the NUMBER and then press START

Note press:
     SPACE BAR to skip a problem,
any LETTER to erase 10's digit error,
     START at any time to end early.

   Figure 1   Beginner's information screen
```

If you press the START key now, the program starts flashing
three minutes of addition problems with single-digit answers.
Children new to computers and math drills should probably start
with these preset choices.

THE ADVANCED USER'S VERSION

Press the OPTION key to display the information screen for the advanced version. That screen looks like this:

            VIDEO MATH FLASH CARDS
            A 2 minute challenge
            press OPTION for beginners

            PUSH START for >>   ADDITION
                                SUBTRACTION
                                MIX + AND -
                                MULTIPLICATION
                                DIVISION
                                ALL 4 MIXED
                                TYPE IN NEW LIMIT
            PRACTICE MULT & DIV TO TABLE OF 9
            Press SELECT key to change practice

            To practice a number
            Press the NUMBER and then press START

            Note press:
                  SPACE BAR to skip a problem,
            any LETTER to erase 10's digit error,
                  START at any time to end early.

              Figure 2   Advanced user's information
                              screen

Each drill in this version lasts only two minutes and earning a good rank is harder.

SELECTING THE KIND OF PROBLEMS YOU WANT TO PRACTICE IN
EITHER VERSION

If you press the START key right away, the program will use all
addition problems. To practice other kinds of problems, press
the SELECT key until the pointer (which looks like this: >>)
points to the kind you want to practice and then press the START
key. (On color televisions, the background color changes when
you move the pointer.)

0-9 ORDER IN BEGINNER'S VERSION

When you select either ADDING IN 0-9 ORDER or MULTIPLY IN
0-9 ORDER, the number next to the addition (+) or multiplication
(x) sign can start with any digit, but this digit increases by one
for each new problem until it reaches 9. Then the digit starts at
0 and increases by one until it reaches 9.

PRACTICING A PARTICULAR NUMBER

If you want to practice your table of 5's or any other single digit
except 0, press that number key before pressing the START key
(this number won't display on your TV screen). If you combine
practicing a particular number with 0-9 ORDER, you can practice
addition or multiplication tables for any digit in order.

PRACTICING A VARIETY OF PROBLEMS

To practice all four kinds of problems at once, select ALL 4
MIXED from the advanced user's information screen and then
press the START key.

CHANGING THE DIFFICULTY OF THE PROBLEMS

The last choice on either screen is to TYPE IN NEW LIMIT. The current limit displays on the line right below this choice. On the beginner's information screen, the line reads:

LARGEST SUM FOR PLUS OR MINUS IS 9

On the advanced user's information screen, the line reads:

PRACTICE MULT & DIV TO TABLE OF 9

Both beginners and advanced users can set any limit between 5 and 18. Press the SELECT key until the pointer >> points to TYPE IN NEW LIMIT. The current limit number will change to an XX. Then type in your new limit. To choose 5, 6, 7, 8, or 9, you must precede the number with a zero (for example, to select 8, type 08).

Any response not between 05 and 18 causes a buzz to sound and the XX's to reappear. Any number between 05 and 18 replaces the old limit on <u>both</u> information screens, and the pointer then automatically returns to the top of the list. If you press the SELECT key before choosing a new number, the pointer returns to the top of the list and the current limit number reappears.

Changing the limit for the advanced version changes the limit on the top digit of any multiplication problem and the divisor on a division problem. Only two-digit products are allowed. Therefore, for example, if you choose 18 as a limit on multiplication problems, 18 x 5 is the largest problem the program will use (since its product, 90, is the largest two-digit answer in the 8's table).

8

Get ready...Get set...Go!

ANSWERING THE PROBLEMS

You have three minutes (in the beginner's version) or two minutes (in the advanced version) to answer as many problems as you can. As each problem flashes on your TV screen, type in your answer by pressing a number key or keys at the top of your computer keyboard. Your answer replaces the question mark--?--on the screen. For example, if the addition problem:

```
     7
   + 6
   ---
     ?
```

flashes on your TV screen, type in

```
   13
```

and the computer will respond:

```
   GOOD
```

and quickly display another problem.

When you answer correctly, the computer beeps and displays "GOOD" as your reward. If you answer incorrectly, the computer buzzes and displays "TRY AGAIN". If you don't want to try again, press the SPACE BAR at the bottom of your computer keyboard. The program counts your answer as incorrect and presents a new problem. (You can try missed problems during the review stage.)

The clock in the upper left-hand corner of your TV screen counts the minutes and seconds that go by as you practice. It stops after you enter a right answer, if it has reached two (or three) minutes. If you want to end your practice sooner, press the START key--the computer then tells you how you've done up to that time. If you did well, try to show your rank to someone before you press the START key to begin your review of missed problems.

LET'S REVIEW

If you miss problems during a drill, you can review them. The program remembers the first twenty missed problems. If you type in a wrong answer, the program displays the correct answer and waits for you to type it in. It often redisplays that problem later in the review. When you answer a review problem correctly, the program continues, until you've answered all the missed problems.

If you don't want to do the review, or if you want to end it early, press the START key. The information screen for your selected version redisplays and you can start another drill.

DOING MORE PRACTICE DRILLS

When you finish a drill (and review), your selected information screen redisplays, with this sentence at the top:

                    WANT TO TRY AGAIN?

You don't have to respond to do another practice drill. This is simply the program's way of telling you it's ready for more. Follow the same steps for picking the kind of problem you want to practice and pressing the START key to begin the drill.

If you don't want to practice any more, press the SYSTEM RESET key and the READY message will display on your TV screen, indicating you're under the control of BASIC.

SCORING

VIDEO MATH FLASH CARDS doesn't give you grades. Instead, you earn a rank. The ranks are, from the top rank to the bottom rank:

> MATHEMATICIAN
> MATH WIZARD
> MATH ACE
> ABOVE AVERAGE
> GOOD WORK
> FAIR
> TRY, TRY AGAIN

In the beginner's version, you have three minutes to do the problems, but you have only two minutes in the advanced version. Earning the top ranks in the advanced version is slightly harder because the number of wrong answers is subtracted from the number of right ones to discourage guessing. One right answer typed in every two seconds earns you the top score.

IF THE PROGRAM STOPS WORKING

VIDEO MATH FLASH CARDS is a BASIC Language program. If it stops and you have the diskette version, try pressing the SYSTEM RESET key, typing RUN, and pressing the RETURN key. If it stops and you have the cassette version, you'll need to reload the program from tape into computer memory.

Quick reference sheet

Use	To
OPTION	Change between the information screens
SELECT	Move the pointer to select a type of practice
START	Start a 2- or 3-minute drill
START	Stop the drill and get a rating
START	Start or end the review phase
SPACE BAR	Skip a problem you can't answer

DON'T USE	Because
Letter keys	They do nothing (except erase 10's digit)
RETURN	It isn't necessary and wastes time
BREAK	It does nothing

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Review Form

We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many of our authors are eager to improve their programs if they know what you want. And, of course, we want to know about any bugs that slipped by us, so that the author can fix them. We also want to know whether our instructions are meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program.

_____

_____

2. If you have problems using the program, please describe them here.

_____

_____

_____

3. What do you especially like about this program?

_____

_____

_____

4. What do you think the program's weaknesses are?

_____

_____

_____

5. How can the catalog description be more accurate or comprehensive?

_____

_____

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program:

_____ Easy to use
_____ User-oriented (e.g., menus, prompts, clear language)
_____ Enjoyable
_____ Self-instructive
_____ Use (non-game programs)
_____ Imaginative graphics and sound

7. Describe any technical errors you found in the user instructions (please gi‾ page numbers).

_____

_____

_____

8. What did you especially like about the user instructions?

_____

_____

_____

9. What revisions or additions would improve these instructions?

_____

_____

_____

10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

_____

_____

11. Other comments about the program or user instructions:

_____

_____

_____

From

_____

_____

_____

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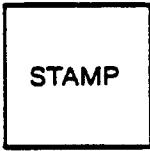
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