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Getting Started

Follow these steps to load the Division Drill program into your ATARI® computer system:

1. With your computer turned off, turn on your television set or monitor and disk drive. Wait for the busy light on the disk drive to go out.

2. If your computer is *not* equipped with built-in ATARI BASIC, insert an ATARI BASIC cartridge in the cartridge slot (the left cartridge slot on the ATARI 800® computer).

3. Insert the Division Drill diskette in your disk drive (disk drive 1, if you have more than one drive) and close the disk drive door or latch.

4. Turn on your computer. As your disk drive goes to work, you’ll hear a beeping sound.

5. When the READY prompt appears on your screen and the disk drive BUSY light goes out, type `RUN"D1:DIVDR"` and press RETURN.

After a few moments, the Division Drill title screen will appear, followed by the first screen of instructions. To begin learning with Division Drill, type in your name and press RETURN. Then simply follow the instructions that appear on the screen. And remember — after entering your answers to the questions asked by Division Drill, you must always press RETURN.
Description of the program

There are three parts, or modules, to the Division Drill program: pre-test, drill, and post-test. Each module may be used independently of the others or in automatic sequence. You may use the pre-test module alone as a self-test.

Pre-test

In the pre-test module, you may select the number of problems to be presented (see How to Select The Number Of Problems, page 6). The program is presently set for 20 problems.

In the pre-test, you must respond correctly in less than 6 seconds to earn credit. As this is a testing mode, correct answers are not given — only an indication of correct, wrong, or correct but too long for credit.

At the end of the pre-test module, your score is displayed. If you score 80 percent or better, you’re congratulated and asked to call the next user (if you’re playing with a friend), thus avoiding having to reload the program. If your score is less than 80 percent, the computer takes you to the drill module.
Division Drill

Drill

The drill module is the heart of the program. It may be used alone or together with the post-test (for example, if a pre-test is not needed). The drill module adjusts to your skill level, so every user can have a feeling of success while improving weak skills.

There are 25 levels of drill. The drill module always begins randomly between levels 10 and 14 (that is, with divisors 5, 6, or 7). It presents sets of three problems at a time with the same divisor. If you score all three problems correct, you’re advanced to the next level. Even-numbered levels allow a 6-second response time, odd-numbered levels a 4-second response time. Divisors are related to levels; that is, levels 10 and 11 use a divisor of 5, levels 12 and 13 use a divisor of 6, and so on.

If you score two correct out of three problems, the computer retains the same level for the next set of three problems.

If you score less than two correct for a set of three problems, the computer decreases the level to the next lower even level (6-second time). In this way, the computer quickly finds a level at which you can be successful two-thirds of the time or better.

After each of three problems, you have the option of C-continuing, S-stopping, or P-taking the post-test. You decide how much drill you want at the moment.
Division Drill

Post-test

The post-test module is like the pre-test module; the same number of randomly selected problems are presented. At the end of the post-test, however, the following message is given to allow you to keep track of your progress:

STAND BY FOR SCOREBOARDS.
PRESS ANY KEY WHEN YOU ARE READY TO CONTINUE.

Scoreboards for any work done in this one sitting are displayed (pre-test, drill, and/or post-test). You may keep track of your progress on the student record sheets on pages 8-9.

How to select the number of problems to be presented in the tests

The number of problems that will be presented in each test module is set at 20 in line 200.

To present only 10 problems to be solved, type:

200 NP = 10

and save the program with a new name like DIV10. You will then have an original program, DIVDR with 20 problems in the pre- and post-tests and a new program, DIV10, with 10 problems in the pre-test and post-tests.

You may change line 200 after loading but before playing, if you want the games you’re now playing to have other than 20 problems.
How to control the range of divisor and quotient in the tests

The divisor and quotient are randomly selected between 1 and 12 inclusive in the pre- and post-tests (see lines 205-210). If you would like your quotient to be in the range between 2 and 5 inclusive, then retype line 205:

205 L1 = 2 : B1 = 5

and for the divisor:

210 L2 = 2 : B2 = 5

In the Drill-Division module, only the quotients will be controlled by the changes above; the divisors will range from 2 through 12 depending on your ability.

How to change times

The length of time given to answer questions is preset at 6 seconds for the pre-test and post-test. During the drill, it can change from 6 and 4 seconds depending on which level you’re working to encourage quicker response. You can change this time yourself by changing the original time variable (OS) in line 202. To change from 6 to 8 seconds, type:

202 OS = 8.
### Division Drill Record Sheet

<table>
<thead>
<tr>
<th>Date</th>
<th>Pre-test</th>
<th>Drill</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Score</td>
<td>Out Of</td>
<td>%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Class</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The ATARI Learning Systems Division Drill program was developed by School & Home CourseWare, Inc.

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