

## Micro Courseware

## Advanced <br> Multiplication \& Division

## A TROLL LEARNING CENTER

This unit contains: 1 micro-software disk and a User's Guide.

#  <br> MICRO <br> COURSEWARE <br> USER'S GUIDE 

## MATH CLASS LEVEL 5:

Advanced Multiplication \& Division

Troll Micro-Software

# Troll Math Class Level 5: Advanced Multiplication \& Division Micro User's Guide 

## System Requirements

1. Apple Ilgs, IIc, Ile, II + , or II (with Applesoft and at least 48K of RAM).
2. One disk drive.
3. A TV set or video monitor (color is recommended).

## How to Use This Program

Troll Math Class is designed to introduce students to basic math skills in a format that is entertaining as well as educational. Each level focuses on a specific concept and includes a variety of activities to teach and reinforce that skill. Level 5: Advanced Multiplication \& Division provides practice in long multiplication, long division, multiplying and dividing decimals, and multiplying fractions.

## Getting Started

Insert the program disk into the disk drive with the label facing up and the oval cutout facing away from you. Close the door on the disk drive and turn on the monitor and computer. The red light on the disk drive will light up as the program loads.

NOTE: Some Apple computers require that PR\#6 be typed before the program begins loading.
When the program has loaded, the Troll logo will appear, followed by the title. The student is then asked to enter his or her name, and whether sound is desired. Then the first menu appears.

1) Multiplication
2) Division
3) Averages
4) Fractions

The student presses 1, 2, or 4 to choose either the Multiplication, Division, or Fractions menu. A second menu will then appear. (If the student presses 3, the Averages activity will load and run automatically.)

## Multiplication

1 Single Digit
2 Two Digit
3 Decimals

Division
1 Single Digit
2 Two Digit
3 Decimals

Fractions
1 Fractions Times Fractions
2 Fractions Times Whole Numbers

To choose an activity from the menu displayed, the student simply presses the number of the desired activity. The activity will load and run automatically.

## Special Keys

## H Help

## CONTROL $X$ Return to First Menu

CONTROL 0 Turn Sound On or Off
\(\left.$$
\begin{array}{ll} & \begin{array}{l}\text { Multiplication } \\
\text { Objective: Students learn to multiply 2-, 3-, 4-, and } \\
\text { 5-digit numbers by a 1-digit number. }\end{array}
$$ <br>
A multiplication problem is presented. The student <br>
multiplies from right to left and enters the result of <br>
multiplying each digit. <br>
Objective: Students gain practice multiplying 2-, 3-, <br>
and 4-digit numbers by a 2-digit number. <br>
Students begin with multiples of 10, then advance to <br>
other 2-digit multipliers. Multiplication is done on <br>
screen, step by step. In a final activity, students <br>
estimate products. <br>
Objective: Students work with tenths, hundredths, and <br>

thousandths, and learn to multiply decimal numbers.\end{array}\right\}\)| Students multiply the same way as they would with |
| :--- |
| whole numbers, then insert the decimal point at the |
| appropriate place. |

## Averages

Averages Objective: Students learn to find the average of 2, 3, 4, and 5 numbers.
Students add 2-5 numbers to find the total, then divide to find the average.

## Fractions

Fractions Times Fractions

Objective: Students learn to multiply a fraction by a fraction.

Aided by graphics, students multiply fractions (halves through tenths) by fractions, then reduce the products to lowest terms.
Fractions Times Whole Numbers

Objective: Students learn to multiply a fraction by a whole number.
With the aid of graphics, students multiply fractions (halves through ninths) by whole numbers, then rewrite the products in lowest terms.

## Care of Disks

The micro-software program is recorded on the magnetic coating of the program disk, which is permanently sealed inside a protective cover. Do not touch the surface of the disk that is visible through the oval cutout in the protective cover. When the disk is not in use, it should be returned to its own envelope and stored in a safe place away from dust, magnetic fields, and temperature and humidity extremes. Do not bend, staple, or write on the disk or its protective cover with ball point pen or pencil.

## Warranty

Troll Associates provides a lifetime guarantee on Troll microsoftware disks. If any program disk is accidentally damaged or ever fails to load or run, simply return it to us for a free replacement.

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## A TROLL LEARNING CENTER

Troll Math Class is the ideal way to introduce students to basic math skills. LEVEL 5: ADVANCED MULTIPLICATION \& DIVISION focuses on advanced multiplication and division skills.
Colorful activities use lively animation and optional sound to help youngsters advance their math skills to include multiplying and dividing large numbers and decimals, finding averages, and multiplying fractions.

## THIS LEARNING CENTER CONTAINS: - a MICRO-SOFTWARE program disk - a User's Guide

