



### Math Operations Grade 5

In **Math Operations Grade 5**, students are able to develop and practice their skills with the principal mathematical operations - addition, subtraction, multiplication and division. The program features 45 activities and countless number questions and word problems. To allow students to build their skills sequentially, the difficulty of the questions in each unit slowly increases. To capture the student's interest, **Math Operations Grade 5** uses hundreds of colorful graphics, animations, sound effects and music. These rewards will motivate the students to continue learning with the software.

### Targeted Skills

- Addition - up to 6 digit by 6 digit, adding more than two numbers, missing term, estimation, word problems
- Subtraction - up to 6 digit from 6 digit, missing term, estimation, word problems
- Multiplication - facts to 12, multiples, 2-3 digits by 1-2 digit, more than two factors, estimation, missing factor, multiplying by 10s, word problems
- Division - facts from 144, long division (3-4 digits by 1-2 digit), factors from 49, prime and composite numbers, dividing by 10s, word problems

### Marks Manager

The Marks Manager tracks student progress throughout each program and records the percentage score for every activity completed. This feature provides an overview of how well a student is progressing and allows the teacher to identify strengths and weaknesses.

- Records students' results automatically as they work.
- Prints reports quickly and easily for sharing with parents and staff.
- Provides summary reports by subject or detailed reports by activity.
- Allows teachers to print reports for individual students or an entire class.
- Stores student marks in one central location for all programs.

## Program Outline

The program is broken down into 4 main units, which can all be accessed from the main menu. On the following pages, each of these different units are broken down. The main menu units are:

1. Addition - 10 activities
2. Subtraction - 8 activities
3. Multiplication - 14 activities
4. Division - 13 activities

## 1. Addition

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
<b>Five Digit Addition</b> (2 activities)	Answer addition problems digit-by-digit. The cursor will be placed in the correct spot to guide students through the problem.	Add two 5-6 digit numbers.
<b>Six Digit Addition</b> (2 activities)		
<b>Addition Challenge</b>	Answer addition problems without digit-by-digit help. This requires students to line the digits up and carry digits on their own.	Correctly set up addition problems. Add two 5-6 digit numbers.
<b>More Than Two</b> (2 activities)	Answer multi-term addition problems digit-by-digit. The cursor will be placed in the correct spot to guide students through the problem.	Add more than two 5-6 digit numbers.
<b>Missing Term</b>	Find the missing term in a basic addition problem.	Perform basic algebra with simple addition problems.
<b>Estimation</b>	Round two numbers to the nearest hundred, then estimate a solution to the problem.	Estimate answers to addition problems.
<b>Addition Word Problems</b>	Apply addition skills in basic real-world addition word problems.	Add two 5-6 digit numbers. Add more than two 5-6 digit numbers.

2. Subtraction

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
<b>Five Digit Subtraction</b> (2 activities)	Answer subtraction problems digit-by-digit. The cursor will be placed in the correct spot to guide students through the problem.	Subtract two 5-6 digit numbers.
<b>Six Digit Subtraction</b> (2 activities)		
<b>Subtraction Challenge</b>	Answer subtraction problems without digit-by-digit help. This requires students to line the digits up and carry digits on their own.	Correctly set up subtraction problems. Subtract two 5-6 digit numbers.
<b>Missing Term</b>	Find the missing term in a basic subtraction problem.	Perform basic algebra with simple subtraction problems.
<b>Estimation</b>	Round two numbers to the nearest hundred, then estimate a solution to the problem.	Estimate answers to subtraction problems.
<b>Subtraction Word Problems</b>	Apply subtraction skills in basic real-world subtraction word problems.	Subtract two 5-6 digit numbers.

3. Multiplication

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
<b>Multiplication Facts</b> (2 activities)	Quickly answer the multiplication fact questions.	Recall multiplication facts to 12 x 12.
<b>First Five Multiples</b>	Enter the first five multiples of a given number.	Understand concept of multiples.
<b>Next Three Numbers</b>	Enter the next three numbers in a given pattern.	Use multiplication to extend basic patterns.
<b>Click on the Multiples I</b>	Which is a multiple of a given number?	Understand multiples. Identify multiples of a given number.
<b>Click on the Multiples II</b>	Click on all of the multiples of a given number.	
<b>Click on the Multiples III</b>	Click on all of the multiples of a given number.	
<b>Multiples In Between</b>	Enter all of the multiples that lie in between two given numbers.	
<b>Multi-Digit by One-Digit</b>	Answer multiplication problems digit-by-digit. The cursor will be placed in the correct spot to guide students through the problem.	Multiply multi digit numbers by 1 digit.
<b>Multi-Digit by Two-Digit I</b>		Multiply multi digit numbers by 2 digits.
<b>Multi-Digit by Two-Digit II</b>		
<b>Multiplying by Tens</b>	Multiply one number by 10, 100, 1000, 10000.	Understand unique property of multiplying by 10s.
<b>More Than Two Factors</b>	Answer multi-term multiplication problems without digit-by-digit help. This requires students to line the digits up and carry digits on their own.	Multiply more than two numbers.
<b>Multiplication Word Problems</b>	Apply multiplication skills in basic real-world multiplication word problems.	Multiply multi digit numbers by 1 digit. Multiply multi digit numbers by 2 digits.

4. Division

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
<b>Division Facts</b> (2 activities)	Quickly answer the division fact questions without remainders.	Recall division facts from 144.
<b>Multi-Digit by One-Digit</b> (2 activities)	(1st activity) Answer division problems digit-by-digit. The cursor will be placed in the correct spot to guide students through the problem.	Divide 3-4 digit numbers by 1-2 digits.
<b>Multi-Digit by Two-Digit</b> (2 activities)	(2nd activity) Answer division problems without digit-by-digit help. This requires students to line the digits up and carry digits on their own.	
<b>Dividing by Tens</b>	Divide a series of numbers by 10, 100, 1000, 10000.	Understand unique property of dividing by 10s.
<b>Click on the Factors I</b>	Click on all of the factors of a given number.	Understand the factors of numbers from 49.
<b>Click on the Factors II</b>		
<b>Prime or Composite I</b>	Is the number you see prime or composite?	Identify prime and composite numbers.
<b>Prime or Composite II</b>	Click on all of the prime numbers. Click on all of the composite numbers.	
<b>Division Word Problems</b>	Apply division skills in basic real-world multiplication word problems.	Recall division facts from 144.
<b>Remainder Word Problems</b>		Divide 3-4 digit numbers by 1 digit.