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Walking Sparky

Move the mouse and click the bone. Sparky walks there. Hold down the mouse button and drag the bone, and Sparky follows. Lead Sparky around rocks, trees, and stuff. (Sparky won't walk through them. It hurts.) You can also walk Sparky by using the arrow keys.

Getting From One World to the Next

There are five worlds in Troggle Trouble: Santa Bongo, Great Gobble Desert, Muncher Mystery Cave, Troggle Swamp, and Frankentroggle's Space-Time Warp. Each world has a secret passage to the next world. It is blocked until you find a clue about TROG or Frankentroggle hidden in each world. The passage opens when you've found what you're looking for. (If you don't remember what to look for, call Magenta by pressing the Phone button.) When it is open, you walk Sparky to the opening. Sparky will "fall" into it, tumble through space, and land in the next world.

Earning Points

Earn points by troggulating troggles, answering problems, solving puzzles, and finding things.

Finding Treats

Sparky treats are scattered everywhere in a world. When you pick up 50 treats, you get a new box of Sparky treats.

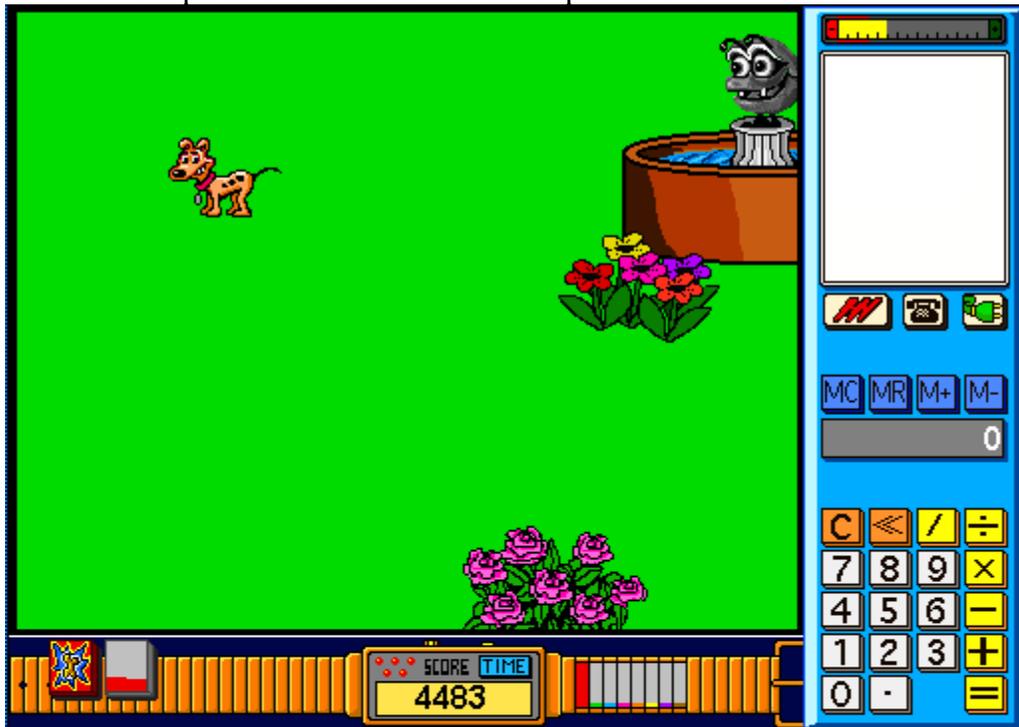
Using Your Watch

The watch shows your level, your points, your boxes of Sparky Treats, and how many treats you've picked up. If you click on the time button, it shows you the time. (The time that your computer thinks it is...If it's not the right time, use the Date/Time Control Panel of your Program Manager to set it to the right time.)



Troggle Trouble Screen

Click on the parts of the screen for an explanation.



Walking Through the Worlds

There are five worlds in Troggle Trouble: Santa Bongo, Great Gobble Desert, Muncher Mystery Cave, Troggle Swamp, and the Frankentroggle's Space-Time Warp. Each world has some of the same things. Each world has a passageway to the next world that is blocked until you find a clue about TROG or Frankentroggle hidden in each world. Each world has several puzzle chambers which you can enter to solve mind-blowing math puzzles and earn fabulous points. Each world has "props" that Sparky bumps into. Each world has a top, bottom, left, and right edge that you can't go beyond.

[Using Your Troggulator](#)

[Using Your Watch](#)

[Getting From One World to the Next](#)

[Entering Puzzle Chambers](#)

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Using Your Troggulator

(1) Your troggulator troggulates troggles. When troggles appear, press the zap button and the safety shields go up around Sparky. Then, enter an equation that uses the operator you have (+, -, x, or \div) and equals the number of troggles you see. Then, press the zap button again. (2) Your troggulator calls Magenta. When Magenta needs to contact you with important information, she calls on the troggulator. When you need to call Magenta, just press the phone button. She will tell you what you need to know. (3) Your troggulator powers itself up. Every time your troggulator troggulates troggles, it uses energy. Your energy will get used up. When the energy gets low, press the electric plug to power back up. Every correct answer in Power Up, boosts your power up a notch.

Entering Puzzle Chambers

Some caves, sheds, and hollow logs lead to puzzle chambers. Click on the opening with your doggie treat and Sparky will walk in.

Solving Puzzles in Puzzle Chambers

Inside a puzzle chamber, you will see a puzzle on the wall. Read the puzzle. Use the troggulator to figure out the answer. Press the "Use It" button when you have the answer. Earn fabulous points! You have four tries to answer the question. You can exit from the Puzzle Chamber by pressing the "Exit" sign. A new puzzle will appear when you have solved the first puzzle or failed to solve it for the fourth time.

Game Settings

In the Settings dialog box, you can:

- Choose faster background graphics if you are using a 386 machine.
You can run Troggle Trouble Math without "Faster Graphics." It will be slower, but look cooler.
- Set a Screen Border to hide the other windows in the background.
With the border on, you can click outside the Troggle Trouble window but you won't switch to another program. This is a great feature for younger kids.
- Clear the Bone-A-Fide Heroes.
"Clear the Bone-A-Fide Heroes" means you erase *all* the names in the high score list. You can't erase just one name...That wouldn't be fair.

The Troggulator Owner's Manual

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[The Troggulator](#)

[Troggulate!](#)

[Power Up!](#)

[Phone Home!](#)

[Calculate!](#)

Troggulator Info

The troggulator is a "Personal Digital Assistant" invented by Magenta. The troggulator troggulates troggles! Only you and the troggulator can stop the invasion of mutant troggles!

When you troggulate, you must carefully adjust the power of the troggulator to the number of troggles on the screen. Enter a math problem that equals the number of troggles you see.

When you troggulate, you use some energy to send mutant troggles back to their own troggle dimension. When the energy gets used up troggulating, you can boost your energy by pressing the Power Up button and answering math questions.

Troggulate!

Count the troggles. Or, click on Sparky inside the safety zone and Sparky will tell you. Check the button you have to use (+, -, x, or /). Enter a math statement using that button to equal the number of troggles you see.

If there are 8 troggles and the "+" key is on, think 'What plus what equals 8?' You can type $6+2=$, or $5+3=$, or $4+4=$ When you find a statement that you think works, press the troggulate button again. If you're right, they get poofed to the troggle dimension. If you're under, some troggles will be zapped back to their own dimension and others will remain. If you're over, the troggulator will not work.

Every troggulation takes energy off the energy bar.

Power Up!

Every time you troggulate, you use up energy. When the troggulator energy runs low, you have to power up. Press the Power Up button to recharge your energy. Answer questions and boost your power back up!

With answers that extend beyond three decimal places, type in three decimal places and round up or down. For example, if the answer to a problem is .666666..., you type **.667**.

Phone Home!

Magenta calls you when you find something. Press the phone button to call Magenta whenever you want. The phone button dials Magenta's number. Each phone call to Magenta uses some energy.

Calculate!

When you are in puzzle chambers or walking Sparky, the troggulator works like a calculator. Just push the buttons to do math problems.

The Troggulator

Press any part of the troggulator for an explanation.



New & Saved Games

[New Game](#)

[Open Game](#)

[Close Game](#)

[Save a game](#)

[Exit](#)

New Game

Start a new game at the beginning. Choose "New Game" from the File menu. You can escape the introduction by pressing "Escape" the key marked "Esc."

Open Game

Open a game that you've saved. Choose "Open Game" from the File menu.

Close Game

Close a game when you don't want to save. Choose "Close Game" from the File menu.

Save a Game

Save your place so you can come back to it later. Choose "Save Game" from the File menu. Give your saved game a name you will remember or use the name that is there. Use "Save As..." to rename your saved game.

Exit

Stop your game and shut off Troggle Trouble Math. Choose "Exit" from the File menu.

Your Troggle Trouble Math Report

[What Your Report Tells](#)

[What the Report Knows](#)

[First Grade Math](#)

[Second Grade Math](#)

[Third Grade Math](#)

[Fourth Grade Math](#)

[Fifth Grade Math](#)

[Sixth Grade Math](#)

What Your Report Tells

Your report tells how you're doing on the math. Choose "Report..." from the File menu. The report shows your grade level, your points, and how well you're doing in Adding, Subtracting, Dividing, and Multiplying.

What the Report Knows

The report keeps track of the correct answers to adding, subtracting, multiplying, and dividing in Troggulating, Power Up math questions, and Puzzle Chambers. Puzzle chamber puzzles may involve numbers outside the normal grade range and use more than one operation. Those kinds of puzzles are reported in the Overall Success, but not in the individual categories of adding, subtracting, dividing, and multiplying.

Grade Level

Choose a grade level to make the math harder or easier. Slide the marker to the point you want. You can choose any grade or in-between point you want.

For information on the math content of a specific grade, choose a topic:

[First Grade Math](#)

[Second Grade Math](#)

[Third Grade Math](#)

[Fourth Grade Math](#)

[Fifth Grade Math](#)

[Sixth Grade Math](#)

First Grade Math

In Troggle Trouble Math's first grade math:

- Children add and subtract whole numbers.
- At first, they use numbers from 1 to 9.
- By the end, they use numbers up to 19.
- They also add up to three whole numbers that can equal up to 19.

Second Grade Math

In Troggle Trouble Math's second grade math:

- Children add and subtract whole numbers.
- At first, they use one number from 1-19 and another from 1-9 that together add up to, at the most, 19.
- At the end of the 2nd grade math, they add numbers from 0-99.
- By the end of 2nd grade math, they multiply the numbers 1-9 by 2, 3, and 5.

Third Grade Math

In Troggle Trouble Math's third grade math:

- Children add and subtract whole numbers from 1-999.
- They practice multiplying two whole numbers from 1×1 to 9×10 .
- They divide similar numbers too.
- They add and subtract numbers that have one decimal place.
- They begin to work with small fractions.

Fourth Grade Math

In Troggle Trouble Math's fourth grade math:

- Children add and subtract one-, two-, and three-digit whole numbers.
- They multiply a whole number from 1-9 by a second that can be as large as 19.
- They practice dividing large whole numbers (up to 1000) by the numbers 1-12.
- They add and subtract numbers with two decimal places.
- They begin adding and subtracting simple fractions.

Fifth Grade Math

In Troggle Trouble Math's fifth grade math:

- Children add and subtract whole numbers up to four digits.
- They multiply and divide large numbers (up to four digits).
- They practice fraction adding, subtracting, and multiplying.
- They add, subtract, multiply, and divide numbers with up to three decimal places.

Sixth Grade Math

In Troggle Trouble Math's sixth grade math:

- Children add and subtract numbers that can be as large as five digits.
- They multiply numbers from 1-100 by numbers from 1-9.
- They divide large numbers as high as 10,000 by one and two digit numbers.
- They do a variety of fraction problems -- adding, subtracting, and multiplying.
- They add, subtract, multiply, and divide numbers that include up to three decimal places.

Math Content

[Troggle Trouble Math](#)

[Setting the Program](#)

[Checking Progress](#)

Troggle Trouble Math

The math in Troggle Trouble Math is tied to what children are doing in 5 popular 1991 math textbook series with three kinds of problems.

(1) Open-ended math. Clear troggles from the scene by typing an equation that equals the number of troggles. For example, a 4th grader sees 10 troggles. The ' \div ' key is on. The child can type in $20\div 2$, $30\div 3$, or $40\div 4$, or any other equation using the ' \div ' key that equals 10. (2) Math practice. Review and practice simple math equations. For example, $6+2$; 9×7 ; $45\div 9$; $13-9$. (3) Story problems. Read story problems to practice math procedures and problem-solving. Story problems may involve numbers outside the normal grade range and more than one operation, but children have the troggulator to help solve the problems.

Setting the Program

Set the grade level when you begin a new adventure. It becomes the "default" grade level for the next new game your child plays. If your child is in the middle of 2nd grade, you can move the grade level to any point between grades 2 and 3.

Troggle Trouble Math adjusts the math difficulty during the game with "continuous progress." If your child is having some difficulty, it bumps down a notch. If your child is excelling, it bumps up a notch. We try to find a "comfort zone" so that success and self-esteem build on each other.

Checking Progress

The report is for adults and children. Check how your child is doing. Use that information to encourage, praise, and challenge your child.

Keyboard Shortcuts

File

Game

Troggulator

File

Command	Keystroke
New Game.....	Alt-F N
Open Game.....	Alt-F O
Save Game.....	Alt-F S
Save As... ..	Alt-F A
End Game.....	Alt-F E
Report.....	Alt-F R
Exit.....	Alt-F X

Game

Command	Keystroke
Sound On/Off.....	Alt-G S
Music On/Off.....	Alt-G M
Pause.....	P

Troggulator

Command	Keystroke
Energize.....] key
Phone.....	' key
Troggulate.....	Space Bar
Clear.....	C
<<.....	Backspace
Fraction.....	/
Percent.....	%
Parentheses.....	()
Numbers.....	1-9
Plus.....	+
Subtraction.....	-
Multiplication.....	*
Divide.....	Ctrl /
Equals.....	=
Use It	Space Bar
MC.....	Ctrl C
MR.....	Ctrl R
M+.....	Ctrl +
M-.....	Ctrl -

The Troggle Field Guide

[Strange Troggles](#)

[Troggles in Santa Bongo](#)

[Troggles in the Muncher Mystery Cave](#)

[Troggles in the Great Gobble Desert](#)

[Troggles in the Troggle Swamp](#)

Strange Troggles



TROG - Troggulus Robotus Cyberneticus



Dr. Loonwig von Frankentroggle

Troggles in Santa Bongo



Reggy Troggle - Troggulus Numerus Animus



Smarty Troggle - Troggulus Multitudo Agitatae



Hydrant Troggle - Troggulus Clamitatus Hydrus

Troggles in the Muncher Mystery Cave



Nighty Troggle - Troggulus Nocturnos Nex



Rocky Troggle - Troggulus Multidus Munitae



Stone Troggle - Troggulus Dominus Lapis

Troggles in the Great Gobble Desert



Spike Troggle - Troggulus Maximus Spiketetus



Shades Troggle - Troggulus Numerus Obscura



Cacti Troggle - Troggulus Necessitas Monstrom

Troggles in the Troggle Swamp



Toad Troggle - *Troggulus Extremus Mutatus*



Stego-Troggle - *Troggulus Armatus*



Bush Troggle - *Troggulus Agitato Arboremus*

Display Area

This is the display area. Every time you enter something on the troggulator, it will show up in the display area.

Energy Bar

This is the energy bar. The energy bar shows how much energy the troggulator has. The more yellow you see the more energy you have. If the energy falls to the orange range, you will not have enough energy to troggulate. Every time you troggulate, you will lose a little energy.

Message Area

This is the message area. It shows messages about troggulating, math, calculating, and using the troggulator.

Phone Button

This is the Phone button. If you want to call Magenta, press this button. It will automatically dial her phone number.

Power Up Button

This is the Power Up button. Press this button when you want to add power to the troggulator.

Troggulate Button

This is the Troggulate button. If you see troggles, press this button right away. Then, with the right math, you can zap those troggles back to their own troggle dimension.

Memory Bubble

This is the memory bubble. It appears only when there is a number in memory. The memory bubble does not show up until the "M+" key is pushed.

Memory Clear

This is the Memory Clear button. When you push this button, it erases the number in the memory bubble of the troggulator.

Memory Recall

This is the Memory Recall button. When you push this button, it will put the number in memory into the display area. You can recall the number stored in memory in the middle of an equation by using this button.

Memory Plus

This button is the Memory Plus button. It adds the number in the display area to memory. If no number is in memory, it places the number in the display area in the memory bubble. If another number is already in memory, it adds the display number to the memory number.

Memory Minus

This is the Memory Minus button. It subtracts the number in the display area from the number that is in memory. If no number is in memory, it creates a negative number. If another number is in memory, it subtracts the display number from the memory number.

Negative/Positive Key

This is the Negative/Positive button. It changes any number from negative to positive, or from positive to negative.

Fraction Bar

This is the Fraction Bar button. It creates fractions in the troggulator display. If you want to type $3/4$, you type 3, fraction bar, 4.

Parentheses

These are the parentheses. Parentheses reorder operations. Type in $5 + 6 \times 7$. It will equal 47. The troggulator multiplies and divides first, then adds and subtracts. When adding and subtracting (or multiplying and dividing) are in the same equation, it performs the operation on the left first, then the operation on the right second. Type in $(5 + 6) \times 7$. It will equal 77. The troggulator does the operation in parentheses first and then does the other operations in the regular order.

Clear Button

This is the Clear button. It clears all numbers from your troggulator display area.

Backspace Button

This is the Backspace button. It erases or deletes the last character you typed.

Percent Button

This is the Percent button. It creates a percentage equation. If you type $10 + 20\%$, the result will be 12. (2 is 20% of 10.) If you type $10 \times 20\%$, the result will be 2. The percent key uses the percentage of the first number and performs the operation on it.

Divide Button

This is the Divide button. When you want to divide one number by another, use this button. ($6 \div 2 = 3$)

Multiply Button

This is the Multiply button. When you want to multiply one number by another, use this button. ($2 \times 2 = 4$)

Add Button

This is the Add button. When you want to add two numbers, you use the Add button. (4 + 5 = 9)

Subtract Button

This is the Subtract button. If you need to subtract one number from another, you use the Subtract button. (4 - 3 = 1)

Equals Button

This is the Equals button. You push this button when you want to know the result of an operation - adding, subtracting, multiplying, or dividing. (6 + 6 = 12)

Decimal Point

This is the decimal point. This button is used with decimal numbers (9.9) or with dollars and cents (\$11.99).

Sparky Treat Boxes

These are your Sparky Treat boxes. When you run out of treat boxes, the game is over. You can have up to five boxes.

Empty Sparky Treat Box

This empty Sparky Treat box gets filled with red as you pick up doggie biscuits. The biscuits are scattered throughout each world. When the box is filled, it turns into a new Sparky Treat box.

Score

This is your score box. It shows the total points you have. You get points for troggulating troggles, solving puzzles, and answering Power Up questions.

Level Lights

These are the level lights. There are 8 lights and 8 levels.

Time Button

This is your Time button. Push it and the it shows the time in the score box. The time is set by your computer in the Control Panel.

Sparky

Here's your dog, Sparky. Sparky follows your treat cursor.

Treat Cursor

This is your treat cursor. It's white. Sparky follows it when you click. If you hold the mouse button down and drag the treat cursor, Sparky follows too. The arrow keys will also control the treat cursor.

Number Buttons

These are the number buttons. When you need to enter a number, you push one of these buttons. Large numbers are entered just as if you were typing. If you need to enter 19, you push 1, then 9.

Zero

This is the Zero button.

Little Lights

These are little lights. They tell you the battery in your watch is working.

Using Game Options

[Pause](#)

[Sound](#)

[Music](#)

[Settings](#)

Sound

Sound refers to sound effects and speech. Turn the sound off and on by choosing Sound from the Game Menu. If the check is beside Sound, it's on. If the check is *not* there, it's off.

Music

Music refers to the melodies for each world. Turn the music off and on by choosing Music from the Game Menu. If the check is beside Music, it's on. If the check is *not* there, it's off.

Pause

Use pause if you want to take a break or time-out. Choose Pause from the Game menu, or press the P key. A message in the Message Area of the Troggulator tells you the game is paused. The game is frozen until you click again. There is no time limit on a pause.

Settings

In the Settings dialog box, you can:

- Choose faster background graphics if you are using a 386 machine.
You can run Troggle Trouble Math without Faster Graphics. It will be slower, but look cooler.
- Set a Screen Border to hide the other windows in the background.
With the border on, you can click outside the Troggle Trouble window but you won't switch to another program. This is a great feature for younger kids.
- Clear the Bone-A-Fide Heroes.
"Clear the Bone-A-Fide Heroes" means you erase *all* the names in the high score list. You can't erase just one name. That wouldn't be fair.

