## 4 Fractions Made Easy Help Contents

The Contents lists Help topics available for Fractions Made Easy. Use the scroll bar to see entries not currently visible in the Help window.

To learn how to use Help, press F1 or choose Using Help from the Help menu
The Screen
Sound

## Having Trouble?

If you are getting an Invalid Property Value message this is usually due to the fact that this program tried but could not install the font resource (needed for this program) into the Windows 95 font table. Why? Good question. Some programs (especially font managers) take over control of the font table and don't allow installation of fonts unless they are installed manually or through the font manager. Is this a nice thing to do? We don't think so and we don't believe Microsoft does either. There is a fix though. To run our program correctly you will have to manually install the font(s) by using the Install New Font option in the File Menu of the Windows 95 Font Folder. All of our true type fonts (usually just one) are located in our program's directory. Make sure that you remove the check mark from the Copy fonts to Windows folder (check box) before you click the OK button. If your still having trouble call Technical Support.

Click the part of the screen window that you want to know more about.


When you click this button a context-sensitive help video will play giving you a detailed explanation on how to solve the current types of problems. For even more help, click on the question mark button for context-sensitive written help text.

When you click this button the LF Software introduction video plays.

This is the blackboard where the fractions and operators will appear.

Enter your answers in these two text boxes. There is a box for both the numerator and denominator unless the answer reduces down to an integer. Press the ENTER key or click over a box to give it the focus. You can click the plus/minus button to change the sign of your answer from positive to negative or from negative to positive.

Click on this button or press F5 to generate and display a new problem.

Click this button or press F3 to see if your answer is right or wrong.

Click on this button or press F2 to change the sign (+/-) of your answer. This button is a toggle and will either display a negative sign or no sign (which is the same thing as positive).

This is Leon, the Fraction Wizard.

This menu bar item is the Options menu which allows you to turn the sound on or off.

You may select one of three levels. Level one is the elementary level where you are introduced to fractions with relatively small numerators and denominators. Level two is the intermediate level where you will work with signed fractions and larger numerators and denominators than in the elementary level. Level three is the advanced level where you will work with signed fractions and mixed numbers.

Click here to exit the program.

These are the operators for the fraction operations. They include addition, subtraction, multiplication and division.

Click here to see the problem worked out.

Click here for context sensitive help dealing with the particular problem type being displayed.

## Your Score



Clicking on this option will display the number of correct and incorrect answers that you have chosen. If you answered a problem correctly a new problem is automatically generated. You may reset your score (start over).

## Playing Sounds

To play the sounds that come with this program, you'll need to click over the Sound option located in the options menu or click over the sound button. The current option selected will have a check mark in front of or the button will be recessed. The settings are automatically saved when they are changed. To properly hear the sound (.WAV) files you'll need to have a sound driver installed as well as a sound card that gives you sound capabilities. Consult your Windows or sound card documentation for further assistance.

Many thanks to Megan Kelly for creating the voices used in this program and mega thanks to Beachware for letting us use sound (.WAV) files from their Shareware Breakthrough CD.

## Calculator Help



Click the part of the Calculator window that you want to know more about.

Clicking on this key causes the displayed value to be stored in the memory register replacing any value already in that register.

Clicking on this key copies the contents of the memory register to the displayed value window. The value in the memory register now becomes the displayed value.

Clicking on this key sums the displayed value and the contents of the memory register with the result being stored in the memory register.

Clicking on this key causes the displayed value and the contents of the memory register to be exchanged.

Clicking on this key clears the current calculation and displayed value. This key does not clear the memory register. To do that click on this key and then click the STO key.
percent function.

Clicking on this key deletes the last digit of the displayed value during the entry process. This key is general used to edit an entry if the wrong digit was pressed.
division operator.
multiplication operator
subtraction operator
addition operator
$=$ performs any calculation on the previous two numbers.
square root function

Clicking on the key finds the nth root of $\mathbf{x}$. Enter $\mathbf{x}$, click this key, enter $\mathbf{n}$ and click the EQUAL key.

Clicking on this key calculates $\mathbf{x}$ to the $\boldsymbol{n}$ power.
the memory register
changes the sign of the displayed value
inserts a decimal point

## Glossary

## Term Definition

Addition The sum of two numbers a and b , where a and b are the addends.

Additive Inverse The additive inverse of a number, $b$, is the opposite, -b.

Algebra

## Associative Property of Addition

Associative Property of Multiplication
Commutative $\quad a+b=b+a$
Property of
Addition

| Commutative <br> Property of <br> Multiplication | $\mathrm{a} \times \mathrm{b}=\mathrm{b} \times \mathrm{a}$ |
| :--- | :--- |
| Complex Fraction | This is any fraction with either the <br> numerator, the denominator, or both <br> containing a fraction. |
| Constant | A constant is a fixed number. |
| Denominator | For the fraction, $\mathrm{a} / \mathrm{b}, \mathrm{b}$ is the <br> denominator. <br> $\mathrm{a}(\mathrm{b}+\mathrm{c})=\mathrm{ab}+\mathrm{ac}$ |
| Distributive <br> Property |  |

## Division

English System of Measurement

Equation

Division can be thought of as repeated subtraction. In the expression $\mathrm{a} \div \mathrm{b}=$ $c, a$ is the dividend, $b$ is the divisor, and c is the quotient. The number a is divisible by b if the remainder is zero.
Algebra is a continuation and extension of the rules of arithmetic into a more general level.
$a+(b+c)=(a+b)+c$
$a \times(b \times c)=(a \times b) \times c$
$a+b=b+a$
$a \mathrm{xb}=\mathrm{b} \times \mathrm{a}$

This is any fraction with either the numerator, the denominator, or both containing a fraction.

A constant is a fixed number.
For the fraction, $a / b, b$ is the denominator.
$a(b+c)=a b+a c$

This is the system of measurement used in the United States.

This is a mathematical sentence stating that two expressions are equal.
$\left.\left.\begin{array}{ll}\text { Equivalent } & \begin{array}{l}\text { These are equations that have the same } \\ \text { solutions. }\end{array} \\ \text { Equations }\end{array} \quad \begin{array}{l}\text { These are fractions that have the same } \\ \text { Equivalent } \\ \text { numerical value. }\end{array}\right] \begin{array}{l}\text { A formula is a sentence expressed } \\ \text { symbolically showing the mathematical } \\ \text { relationships among variables. }\end{array}\right\}$

| Pi | Pi is the number of times the diameter divides into the circumference of a circle. It is approximately 3.14 times. ( $\pi \approx 3.14$ ) |
| :---: | :---: |
| Place Value | The place value of a digit in a decimal number is the name of the place or location of that digit in the decimal number. |
| Positive numbers | The positive numbers are those numbers greater than zero. |
| Prime <br> Factorization | The prime factorization of a number is the expression of that number as a product of its prime factors. |
| Prime Numbers | \{1,2,3,5,7,11,13,17,19,23, ... |
| Proper Fraction | A proper fraction is one with the top number smaller than the bottom number. |
| Proportion | A proportion is an equation with one fraction set equal to another fraction. |
| Rate | A rate is a ratio of two numbers with different units like 40 miles/ 2 hours. |
| Ratio | A ratio is a fraction, $\mathrm{a} / \mathrm{b}$. |
| Reciprocal | The reciprocal of a fraction, $a / b$, is the fraction, b/a. |
| Repeating Decimal | A repeating decimal expansion of a fraction is one in which a repeating pattern of digits occurs. |
| Solution | A solution of an equation in one variable is a number that makes a true sentence of the equation. It is also a root of the equation. |
| Subtraction | In the subtraction expression, $a-b=c$, $a$ is the minuend, $b$ is the subtrahend, and $c$ is the difference. |
| Terminating Decimal | A terminating decimal expansion of a fraction is one in which the decimal expansion has all zeros from some point on. |
| Undefined Division | Division by zero is undefined. |

Whole Numbers $\quad\{0,1,2,3,4, \ldots\}$

