

The book was found

Math Fundamentals 2 (Quickstudy: Academic)

Quick Study ACADEMIC **Math Fundamentals 2** Algebra - exponents, equations, polynomials, factoring & more!

Boost math confidence & test scores!

What is Algebra? Algebra is the branch of mathematics that uses symbols (especially letters) to generate certain arithmetical operations and relationships. **Equations, inequalities, integers, polynomials** and sequences are only some of the parts of algebra.

Arithmetic, which can be thought of as the ABCs of math, deals with computation and calculation that is, non-negative real numbers and the application of basic mathematical operations—addition, subtraction, multiplication, division.

REAL NUMBER SYSTEM

Set of Rational Numbers: Rational Numbers (The ratio of two integers, included):
Fractions: $\frac{1}{2}, \frac{3}{4}, \frac{7}{8}, -23\frac{1}{3}, -\frac{12}{17}$
Decimals:
 Terminating decimals: 2.5, 0.6, -7.3
 Repeating decimals: $0.\overline{7}$, $4.\overline{33}$, $-2.\overline{78}$
Integers (all whole numbers and their opposites):
 ..., -2, -1, 0, 1, 2, 3, ...
Whole Numbers (all the counting numbers plus 0):
 0, 1, 2, 3, 4, ...
Natural Numbers (all the counting numbers):
 1, 2, 3, 4, 5, ...

Real numbers = set of rational numbers + set of irrational numbers

Set of Irrational Numbers: Non-terminating and non-repeating decimals, such as: irrational numbers cannot be written as the ratio of two integers.
 $\pi = 3.141592654...$
 $\sqrt{2} = 1.414213562...$
 $56.7843271...$ (Repeating dots indicate number doesn't terminate)
All non-perfect square numbers have irrational square roots:
 $\sqrt{3} = 1.7320508...$

BASIC ALGEBRA TERMS

Simplify: Combine any like terms, complete any operations within the problem. **EX:** $3x + 2y + 6x = 9x + 2y$

Evaluate: Solve to evaluate $3x + 2y$ when $x = 4$ and $y = 5$, substitute values for x and y , then solve. **EX:** $3(4) + 2(5) = 12 + 10 = 22$

Simplify Form: All solutions must be in lowest terms. **EX:** $\frac{2}{6} = \frac{1}{3}$
 $3\frac{1}{4} = 4\frac{1}{4}$

One-Step Equations: Solve using one inverse operation to isolate the variable.
 $x + 5 = 10$
 $-5 \quad -5$
 $x = 5$
 $9 = y - 4$
 $+4 \quad +4$
 $13 = y$
 $\frac{4x}{4} = \frac{12}{4}$
 $x = 3$

Two-Step Equations: Solve using two inverse operations to isolate the variable; begin with value farthest from variable (on same side).
 $2x + 10 = 12$ $16 = 3y + 21$
 $-10 \quad -10$ $-21 \quad -21$
 $2x = 2$ $16 = 3y$
 $\frac{2x}{2} = \frac{2}{2}$ $\frac{16}{3} = \frac{3y}{3}$
 $x = 1$ $16 = 3y$
 $-16 \quad -16$
 $0 = 3y - 16$
 $+16 \quad +16$
 $16 = 3y$
 $\frac{16}{3} = \frac{3y}{3}$
 $\frac{16}{3} = y$

Equations with Distributive Property: Distribute the value outside the parentheses to all values inside the parentheses; solve using normal steps.
 $4(5 + 3) = 20$ $-8(x - 4) = 15$
 $20 + 12 = 20$ $-8x + 32 = 15$
 $+12 = +12$ $-8x = 15 - 32$
 $32 = 20$ $-8x = -17$
 $\frac{32}{8} = \frac{20}{8}$ $\frac{-8x}{-8} = \frac{-17}{-8}$
 $4 = \frac{20}{8}$ $x = \frac{17}{8}$
 $x = \frac{5}{2}$ $x = 2.125$

ALWAYS distribute a negative!

Copyrighted Material



Synopsis

This fantastic overview of integers, exponents, equations, polynomials and functions is great for middle and high school students. It will help boost math confidence and test scores.

Book Information

Series: Quickstudy: Academic

Pamphlet: 4 pages

Publisher: QuickStudy; Lam Crds edition (May 22, 2008)

Language: English

ISBN-10: 1423204255

ISBN-13: 978-1423204251

Product Dimensions: 8.5 x 11 x 0.1 inches

Shipping Weight: 1.4 ounces (View shipping rates and policies)

Average Customer Review: 4.9 out of 5 stars 26 customer reviews

Best Sellers Rank: #27,319 in Books (See Top 100 in Books) #7 in Books > Science & Math > Mathematics > Reference #43 in Books > Science & Math > Mathematics > Study & Teaching #103 in Books > Science & Math > Mathematics > Pure Mathematics > Algebra > Elementary

Customer Reviews

Another wonderful addition to the fundamental series. If you have used the first in this group you will understand the importance of having the complete set. This has a few tips and reminders that are on the first set but expand formulas and skills for the next level. What a great tool to have on hand for quick study and easy access to formulas and explanations. I love the way the steps are easy to follow, and the examples clearly identify how they should be used. I highly recommend this product.

There are five in this series and each one advances further into elementary and some middle school maths. Very helpful.

great

Extremely useful!

I purchased Math Fundamentals 1-4 for my daughter. Math Fundamentals 2, like the others, is a jam-packed quick reference that she likes to keep in a 3 ring binder in her backpack so it is handy at

school and for homework. I anticipate keeping it for a long time as a study guide for class and standardized tests. I also find it useful for myself when helping her with homework, but because of Math Fundamentals' great examples and thorough, easy to understand instructions, I don't think she will need to come to me for much help at all!

All good thank you

As a homeschooling mom and former teacher, these guides are a great asset to my children/students.

I have a 14yr old that I home school and he is having trouble with Math. These charts are very detailed and self explanatory and I would encourage anyone struggling in Math to try these out. They really do help. The cost is very low and they deliver very very quickly!

[Download to continue reading...](#)

Math Fundamentals 2 (Quickstudy: Academic) Math Fundamentals 3 (Quickstudy: Academic) Medical Math (Quickstudy: Academic) Illinois TAP Math: Test of Academic Proficiency - Math Preparation Math Fundamentals 1 Quick Reference Guide pamphlet (Quick Study Academic) Trigger Points (Quickstudy: Academic) Acupressure (Quickstudy: Academic) Reflexology (Quickstudy: Academic) Latin Grammar (Quickstudy: Academic) Latin Vocabulary (Quickstudy: Academic) Medical Coding (Quickstudy: Academic) Medical Terminology: The Basics (Quickstudy: Academic) Heart (Quickstudy: Academic) Physical Therapy (Quickstudy: Academic) Respiratory System (Quickstudy: Academic) Spanish Verbs (Quickstudy: Academic) Electronics 1 Part 1 (Quickstudy: Academic) Electronics 1 Part 2 (Quickstudy: Academic) Statistics Laminate Reference Chart: Parameters, Variables, Intervals, Proportions (Quickstudy: Academic) Statistics Equations & Answers (Quickstudy: Academic)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)