



**The Knowsys That's Genius! Pre-Algebra Workbook** covers all the essential pre-Algebra material that students need to master for use in high school math courses and on the college entrance exams. Students who accelerate past without mastering these concepts are at a disadvantage on the PSAT, the SAT, and the ACT exams. Those exams test many pre-Algebra concepts . . . and absolutely no concepts from Calculus and beyond!

The Workbook is a systematic and organized presentation of the concepts our students need to know. It covers essential TEKS from 6th, 7th, and 8th grade math (plus some 4th and 5th grade TEKS as well!). It features systematic, organized presentations of the concepts and provides multi-step, complex word problems and a focus on math vocabulary and necessary knowledge.

### Emphasis: Think first, then solve:

The workbook provides step-by-step methods for thinking through complex problems, making approximations, reading carefully, etc. There is no calculator work. Students are taught to think to solve problems accurately and efficiently without a calculator.

### Designed for Accelerated Students:

For students who are accelerated into Algebra I prior to taking 8th grade Math, this Workbook provides a quick, thorough review of the essential middle-school concepts that are foundational to Algebra success and to success on the PSAT, the SAT, and the ACT college entrance exams.

### Student Resources:

Knowsys offers consumable Student Workbooks with plenty of space to work out problems and a simple, clean design to keep students focused. Pre-Algebra Flashcards with all the Vital Vocab and Necessary Knowledge are also available.

## Progression of Lessons

- Necessary Knowledge
- PEMDAS
- Distributive Law
- Fractions
- Estimating
- Proportions
- Scientific Notation
- Linear Equations
- Data Analysis
- Sequences
- Geometric Shapes & Similar Figures
- Dilations & Transformations
- Coordinate Grid
- Triangles & Pythagorean Theorem
- Probability
- Graphs and Charts
- Patterns
- Methods
- Data Representation
- Word Problems (throughout)

## Flashcards

*Also Available*

