

# TAKS Math Exit Exam Review Lessons

## SCOPE

The successful completion of the Texas Assessment of Knowledge and Skills (TAKS) Exit-Level Math Exam is required of every Texas high school student in order to receive a diploma. Preparing for this assessment – a comprehensive examination of algebra, geometry, measurement, probability, and statistics – can be overwhelming for students. The test challenges students to synthesize knowledge of mathematical techniques with non-routine word problems. The writers of this product have addressed these areas of difficulty with a preparation guide that is both approachable and in-depth. Materials are written at an appropriate reading level for the intended audience, and the lessons balance instruction with the problem-solving and test-taking strategies needed to solve typical TAKS questions. While the lessons are geared specifically for TAKS preparation, the concepts and instructional strategies are appropriate for any student preparing for exit-level examinations or higher-level mathematics final course assessments.

## SEQUENCE OF SKILLS

- Ways to represent a function
- Functional relationships
- Analyzing tables and graphs of functions
- Parent functions, domain, & range
- Analyze and interpret graphs
- Arithmetic properties and polynomials
- Writing equations from sentences
- Linear functions
- Understanding  $y = mx + b$
- Linear equations
- Equations and inequalities
- Systems of equations
- Properties of quadratic graphs
- Solving quadratic equations
- Using the quadratic formula & learning the laws of exponents
- Two- and three-dimensional shapes
- Transformations and tessellations
- Pythagorean triples & special right triangles
- Distance, midpoint, and 3d formulas
- Nets and surface area
- Perspective
- Pythagorean theorem and beyond
- Using proportions
- Changing figures and using a ruler
- Proportions with percents and rates
- Probability
- Statistics
- Solving problems
- Test-taking strategies