

TAKS Objectives and TEKS Student Expectations

This chart matches TAKS Objectives and TEKS Student Expectations to the Lessons in *How to Get Better Test Scores, Grade 8, Math*. TEKS in brackets are not assessed on the TAKS.

Lesson	TAKS Objectives and TEKS Student Expectations
Lesson 1 Numbers and Operations	TAKS Objective 1 The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.
	TEKS 8.1 (A) compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals; (B) select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships; (C) approximate mentally [and with calculators] the value of irrational numbers as they arise from problem situations (π , $\sqrt{2}$); and (D) express numbers in scientific notation, including negative exponents, in appropriate problem situations [using a calculator].
	TEKS 8.2 (A) select and use appropriate operations to solve problems and justify the selections; (B) add, subtract, multiply, and divide rational numbers in problem situations; (C) evaluate a solution for reasonableness; and (D) use multiplication by a constant factor (unit rate) to represent proportional relationships; for example, the arm span of a gibbon is about 1.4 times its height, $a = 1.4h$.
Lesson 2 Patterns and Relationships	TAKS Objective 2 The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.
	TEKS 8.3 (A) compare and contrast proportional and non-proportional relationships; and (B) estimate and find solutions to application problems involving percents and proportional relationships such as similarity and rates.
	TEKS 8.4 (A) generate a different representation given one representation of data such as a table, graph, equation, or verbal description.
	TEKS 8.5 (A) estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations; and (B) use an algebraic expression to find any term in a sequence.
Lesson 3 Geometry	TAKS Objective 3 The student will demonstrate an understanding of geometry and spatial reasoning.
	TEKS 8.6 (A) generate similar shapes using dilations including enlargements and reductions; and (B) graph dilations, reflections, and translations on a coordinate plane.
	TKES 8.7 (A) draw solids from different perspectives; (B) use geometric concepts and properties to solve problems in fields such as art and architecture; (C) use pictures or models to demonstrate the Pythagorean Theorem; and (D) locate and name points on a coordinate plane using ordered pairs of rational numbers.