

## 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
<b>Lesson 1</b> Numbers and Operations	<b>TAKS Objective 1</b> <b>The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.</b>
	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 ( $\pi$ , $\sqrt{2}$ ); 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, $a = 1.4h$ .
<b>Lesson 2</b> Patterns and Relationships	<b>TAKS Objective 2</b> <b>The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.</b>
	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.
<b>Lesson 3</b> Geometry	<b>TAKS Objective 3</b> <b>The student will demonstrate an understanding of geometry and spatial reasoning.</b>
	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.