

**TCAP Achievement, Grade 8, Mathematics**  
**Criterion Referenced Test (CRT) Reporting Categories with State Performance Indicators**

<b>Mathematical Processes</b>	
<b>SPI#</b>	<b>State Performance Indicator</b>
0806.1.1	Solve problems involving rate/time/distance (i.e., $d = rt$ ).
0806.1.2	Interpret a qualitative graph representing a contextual situation.
0806.1.3	Calculate rates involving cost per unit to determine the best buy.
<b>Number and Operations</b>	
<b>SPI#</b>	<b>State Performance Indicator</b>
0806.2.1	Order and compare rational and irrational numbers and locate on the number line.
0806.2.2	Identify numbers and square roots as rational or irrational.
0806.2.3	Use scientific notation to compute products and quotients.
0806.2.4	Solve real-world problems requiring scientific notation.
<b>Algebra</b>	
<b>SPI#</b>	<b>State Performance Indicator</b>
0806.3.1	Find solutions to systems of two linear equations in two variables.
0806.3.2	Solve the linear equation $f(x) = g(x)$ .
0806.3.3	Solve and graph linear inequalities in two variables.
0806.3.4	Translate between various representations of a linear function.
0806.3.5	Determine the slope of a line from an equation, two given points, a table or a graph.
0806.3.6	Analyze the graph of a linear function to find solutions and intercepts.
0806.3.7	Identify, compare and contrast functions as linear or nonlinear.
<b>Geometry and Measurement</b>	
<b>SPI#</b>	<b>State Performance Indicator</b>
0806.4.1	Use the Pythagorean Theorem to solve contextual problems.
0806.4.2	Apply the Pythagorean theorem to find distances between points in the coordinate plane to measure lengths and analyze polygons and polyhedra.
0806.4.3	Find measures of the angles formed by parallel lines cut by a transversal.
0806.4.4	Convert between and within the U.S. Customary System and the metric system.
0806.4.5	Identify the intersection of two or more geometric figures in the plane.
<b>Data Analysis, Statistics, and Probability</b>	
<b>SPI#</b>	<b>State Performance Indicator</b>
0806.5.1	Calculate probabilities of events for simple experiments with equally probable outcomes.
0806.5.2	Use a variety of methods to compute probabilities for compound events (e.g., multiplication, organized lists, tree diagrams, area models).
0806.5.3	Generalize the relationship between two sets of data using scatterplots and lines of best fit.
0806.5.4	Recognize misrepresentations of published data in the media.