

## 6th Grade Mathematics TAKS Matrix

### 6th Grade TAKS test

TEKS	Student Expectation	2003	2004	2005	Priority
<b>OBJECTIVE 1</b>	<b>Number Operations, and Quantitative Reasoning</b>	<b>10 Total</b>	<b>10 Total</b>	<b>10 Total</b>	<b>10 Total</b>
6.1A	compare and order non-negative rational numbers	7,16	31	22	H
6.1B	generate equivalent forms of rational numbers including whole numbers, fractions, and decimals	20	28	36	H
6.1C	use integers to represent real life situations	36		29	H
6.1D	write prime factorizations using exponents	14	39	20	H
6.1E	identify factors and multiples including common factors and common multiples	38	17,29	46	H
6.2A	model addition and subtraction situations involving fractions using objects, pictures, words, and numbers	12	11	9	H
6.2B	use addition and subtraction to solve problems involving fractions and decimals	42	21,45	8,13	H
6.2C	use multiplication and division of whole numbers to solve problems involving equivalent ratios and rates	32	15	23	H
6.2D	estimate and round to approximate reasonable results and to solve problems where exact answers are not required	44	5	43	H

<b>OBJECTIVE 2</b>	<b>Patterns, Relationships, and Algebraic Reasoning</b>	<b>9 Total</b>	<b>9 Total</b>	<b>9 Total</b>	<b>9 Total</b>
6.3A	use ratios to describe proportional situations	24,35	26	7,10	H
6.3B	represent ratios and percents with concrete models, fractions, and decimals	18	14,42	21	H
6.3C	use ratios to make predictions in proportional situations	10,15	9,37	33,39	H
6.4A	use tables and symbols to represent and describe proportional and other relationships involving conversion, sequences, perimeter, area, etc.	28	2	32,34	H
6.4B	generate formulas to represent relationships involving perimeter, area, volume of a rectangular prism, etc. from a table of data	37	25,34	31	H
6.5	formulate and equation from a problem situation	29,45	19	15	H

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<b>OBJECTIVE 3</b>	<b>Geometry and Spatial Reasoning</b>	<b>7 Total</b>	<b>7 Total</b>	<b>7 Total</b>	<b>7 Total</b>
6.6A	use angle measurements to classify angles as acute, obtuse, or right	4,5	44	1	H
6.6B	identify relationships involving angles in triangles and quadrilaterals	30,40	12,40	11	H
6.6C	describe the relationship between radius, diameter, and circumference of a circle	27	10,23	19,40	H
6.7	locate and name points on a coordinate plane using ordered pairs of non-negative rational numbers	39,43	1,41	5,15,45	H

<b>OBJECTIVE 4</b>	<b>Measurement</b>	<b>5 Total</b>	<b>5 Total</b>	<b>5 Total</b>	<b>5 Total</b>
6.8A	estimate measurements and evaluate reasonableness of results	34	30	3	H
6.8B	select and use appropriate units, tools, or formulas to measure and to solve problems involving length (including perimeter and circumference), area, time, temperature, capacity, and weight	21,23	16,32	12,27	H
6.8C	measure angles	19	7	24	H
6.8D	convert measures within the same measurement system (customary and metric) based on relationships between units	9	46	18	H

<b>OBJECTIVE 5</b>	<b>Probability and Statistics</b>	<b>6 Total</b>	<b>6 Total</b>	<b>6 Total</b>	<b>6 Total</b>
6.9A	construct sample spaces using lists, tree diagrams, and combinations	22	43	42	H
6.9B	find the probabilities of a simple event and its complement and describe the relationship between the two.	25	35	25	H
6.10A	draw and compare different graphical representations of the same data	1	4		H
6.10B	use median, mode, and range to describe data	26	13	14,17	H
6.10C	sketch circle graphs to display data	46	22	30	H
6.10D	solve problems by collecting, organizing, displaying, and interpreting data	6	20	28	H

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OBJECTIVE 6	Mathematical Processes and Tools	9 Total	9 Total	9 Total	9 Total
6.11A	identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics	3,33	36	26,44	H
6.11B	use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	13,41	18,33	35	H
6.11C	select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem	2	6,8,24	2	H
6.11D	select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems				<b>M</b>
6.12A	communicate mathematical ideas using language. Efficient tools, appropriate units, and graphical numerical, physical, or algebraic mathematical models	11,31	27,38	6,38,41	H
6.12B	evaluate the effectiveness of different representations to communicate ideas				M
6.13A	make conjectures from patterns or sets of examples and nonexamples	17	3		H
6.13B	validate his/her conclusions using mathematical properties and relationships	8		6,37	H