

**2003 TAKS Math Assessment
Third Grade**

Student Expectations	Test Items
3.1(A) use place value to read, write (in symbols and words), and describe the value of whole numbers through 999,999	2
3.1(B) use place value to compare and order whole numbers through 9,999	40
3.1(C) determine the value of a collection of coins and bills	39
3.2(B) compare fractional parts of whole objects or sets of objects in a problem situation using [concrete] models	19
3.2(C) use fractions names and symbols to describe fractional parts of whole objects or sets of objects with denominators of 12 or less	6
3.3(A) model addition and subtraction using pictures, words, and numbers	28
3.3(B) select addition or subtraction and use the operation to solve problems involving whole numbers through 999	9
3.4(B) solve and record multiplication problems (one-digit multiplier)	27
3.4(C) use models to solve division problems and use number sentences to record the solutions	36
3.5(A) round two-digit numbers to the nearest ten and three-digit numbers to the nearest hundred	20
3.5(B) estimate sums and differences beyond basic facts	
3.6(A) identify and extend whole-number and geometric patterns to make predictions and solve problems	15, 21, 38
3.6(B) identify patterns in multiplication facts using [concrete objects,] pictorial models, [or technology]	4
3.6(C) identify patterns in related multiplication and division sentences (fact families) such as $2 \times 3 = 6$, $3 \times 2 = 6$, $6 \div 2 = 3$, $6 \div 3 = 2$	31, 34
3.7(A) generate a table of paired numbers based on a real-life situation such as insects and legs	
3.7(B) identify patterns in a table of related number pairs based on a real-life situation and extend the table	
3.8(A) name, describe, and compare shapes and solids using formal geometric vocabulary	3, 23
3.9(A) identify congruent shapes	11
3.9(C) identify lines of symmetry in shapes	8
3.10(A) locate and name points on a line using whole numbers [and fractions such as halves]	7, 16
3.11(A) estimate and measure lengths using standard units such as inch, foot, yard, centimeter, [decimeter] and meter	13
3.11(B) use linear measure to find the perimeter of a shape	5
3.11(C) use [concrete] models of square units to determine the area of shapes	35
3.12(A) tell and write time shown on traditional and digital clocks	25
3.12(B) use a thermometer to measure temperature	32
3.13(A) measure to solve problems involving length, [area,] temperature, and time	18
3.14(A) [collect,] organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data	1, 12
3.14(B) interpret information from pictographs and bar graphs	
3.14(C) use data to describe events as more likely, less likely, or equally likely	30, 33
3.15(A) identify the mathematics in everyday situations	22, 24
3.15(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	14
3.15(C) select or develop an appropriate problem-solving strategy, 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	17, 37
3.16(B) relate informal language to mathematical language and symbols.	26
3.17(A) make generalizations from patterns or sets of examples and nonexamples.	10, 29

**2003 TAKS Math Assessment
Fourth Grade**

Student Expectations	Test Items
4.1 (A) use place value to read, write, compare, and order whole numbers through the millions place	
4.2 (A) generate equivalent fractions using [concrete and] pictorial models	14
4.2 (B) model fraction quantities greater than one [concrete materials and] pictures	6
4.2 (C) compare and order fractions using [concrete and] pictorial models	32
4.2 (D) relate decimals to fractions that name tenths and hundredths using models	20
4.3 (A) use addition and subtraction to solve problems involving whole numbers	24
4.3 (B) add and subtract decimals to the hundredths place using [concrete and] pictorial models	
4.4(A) model factors and products using arrays and area models	36
4.4(B) represent multiplication and division situations in picture, word, and number form	35
4.4(C) recall and apply multiplication facts through 12×12	10
4.4(D) use multiplication to solve problems involving two-digit numbers	5
4.4(E) use division to solve problems involving one-digit divisors	8
4.5(A) round whole numbers to the nearest ten, hundred, or thousand to approximate reasonable results in problem situations	42
4.5(B) estimate a product or quotient beyond basic facts	
4.6(B) solve division problems related to multiplication facts (fact families) such as $9 \times 9 = 81$ $81 \div 9 = 9$	1,39
4.6(C) use patterns to multiply by 10 and 100	21,23
4.7(A) describe the relationship between two sets of related data such as ordered pairs in a table	18,25,38
4.8(A) identify right, acute, and obtuse angles	9
4.8(B) identify models of parallel and perpendicular lines	26
4.8(C) describe shapes and solids in terms of vertices, edges, and faces	34
4.9(B) use translations, reflections, and rotations to verify that two shapes are congruent	40
4.9(C) use reflections to verify that a shape has symmetry	2
4.10(A) locate and name points on a number line using whole numbers, fractions such as halves and fourths, and decimals such as tenths	37
4.11(A) estimate [and measure] weight using standard units including ounces, pounds, grams, and kilograms	3
4.11(B) estimate [and measure] capacity using standard units including milliliters, liters, cups, pints, quarts, and gallons	22
4.12(A) measure to solve problems involving length, including perimeter, time, temperature, and area	15,17,28,30
4.13(A) list all possible outcomes of a probability experiment such as tossing a coin	16
4.13(B) use a pair of numbers to compare favorable outcomes to all possible outcomes such as four heads out of six tosses of a coin	11
4.13(C) interpret bar graphs	4,41
4.14(A) identify the mathematics in everyday situations	7,33
4.14(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	12,31
4.14(C) select or develop an appropriate problem-solving strategy, 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	27
4.15(B) relate informal language to mathematical language and symbols	13,19
4.16(A) make generalizations from patterns or sets of examples and nonexamples	29

**2003 TAKS Math Assessment
Fifth Grade**

Student Expectations	Test Item
5.1 (A) use place value to read, write, compare, and order whole numbers through the billions place	15
5.1 (B) use place value to read, write, compare, and order decimals through the thousandths place	4
5.2 (A) generate equivalent fractions	40
5.2 (B) compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators	27
5.2 (C) use models to relate decimals to fractions that name tenths, hundredths, and thousandths.	39
5.3 (A) use addition and subtraction to solve problems involving whole numbers and decimals;	21, 38
5.3 (B) use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology)	1
5.3 (C) use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology)	
5.3 (D) identify prime factors of a whole number and common factors of a set of whole numbers	13
5.3 (E) model and record addition and subtraction of fractions with like denominators in problem solving situations	33
5.4 (A) round whole numbers and decimals through tenths to approximate reasonable results in problem situations	7
5.4 (B) estimate to solve problems where exact answers are not required	
5.5 (A) use [concrete objects or] pictures to make generalizations about determining all possible combinations	26
5.5 (B) use lists, tables, charts, and diagrams to find patterns and make generalizations such as a procedure for determining equivalent fractions	20, 32
5.5 (C) identify prime and composite numbers using [concrete] models and patterns in factor pairs	22
5.6 (A) select from and use diagrams and number sentences to represent real-life situations	3, 9, 34
5.7 (A) identify critical attributes including parallel, perpendicular, and congruent parts of geometric shapes and solids	35
5.7 (B) use critical attributes to define geometric shapes or solids	10, 18
5.8 (A) sketch the results of translations, rotations, and reflections	11
5.8 (B) describe the transformation that generates one figure from the other when given two congruent figures	23
5.9 (A) locate and name points on a coordinate grid using ordered pairs of whole numbers	2, 43
5.10 (A) measure volume using [concrete] models of cubic units	14, 25
5.11 (A) measure to solve problems involving length (including perimeter), weight, capacity, time, temperature, and area	8, 28, 37
5.11 (B) describe numerical relationships between units of measure within the same measurement system such as an inch is one-twelfth of a foot	16, 24
5.12 (A) use fractions to describe the results of an experiment	19
5.12 (B) use experimental results to make predictions	
5.13 (A) use tables of related number pairs to make line graphs	41
5.13 (B) describe characteristics of data presented in tables and graphs including the shape and spread of the data and the middle number	30
5.13 (C) graph a given set of data using an appropriate graphical representation such as a picture or line	5
5.14 (A) identify the mathematics in everyday situations	6, 12, 42
5.14 (B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	17, 31
5.14 (C) select or develop an appropriate problem-solving strategy, 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	29, 36
5.15 (B) relate informal language to mathematical language and symbols	44
5.16 (A) make generalizations from patterns or sets of examples and nonexamples	

