

## “Such As” Statements Kindergarten – Grade 8

This document contains the “such as” statements that were included in the review committees’ final recommendations for revisions to the mathematics Texas Essential Knowledge and Skills (TEKS). Such as statements are possible illustrative examples and are not required to be included in instruction in the TEKS. This document is intended to serve as a resource for teachers in designing instruction for mathematics TEKS.

### §111.2, Kindergarten

	Knowledge and Skill Statement/Student Expectation (as adopted in 2012)	Student Expectation Including Original “Such As” Statement
(6)	Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:	
(6)(C)	identify two-dimensional components of three-dimensional objects;	identify two-dimensional components of three-dimensional objects such as the face of a tissue box is a rectangle
(6)(D)	identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably;	identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably such as number of corners or vertices and number of sides
(9)	Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	
(9)(C)	list simple skills required for jobs; and	list simple skills required for jobs such as bus driver, librarian,

§111.3,Grade1

	Knowledge and Skill Statement/Student Expectation (as adopted in 2012)	Student Expectation Including Original "Such As" Statement
(2)	Number and operations. The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to:	
(2)(A)	recognize instantly the quantity of structured arrangements;	recognize instantly the quantity of structured arrangements such as seen on a die or a ten frame
(5)	Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:	
(5)(G)	apply properties of operations to add and subtract two or three numbers.	apply properties of operations to add and subtract two or three numbers such as if $2 + 3 = 5$ is known, then $3 + 2 = 5$
(6)	Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:	

(6)(B)

(6)(G) partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words or

§111.4, Grade 2

	Knowledge and Skill Statement/Student Expectation (as adopted in 2012)	Student Expectation Including Original "Such As" Statement
(3)	Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to:	
(3)(A)	partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words;	partition objects such as strips, lines, regular polygons, and circles into equal parts and name the parts, including halves, fourths, and eighths, using words such as "one-fourth" or "three-fourths";
(3)(C)	use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole; and	use concrete models to count fractional parts beyond one whole using words such as "one-fourth," "two-fourths," "three-fourths," "four-fourths," "five-fourths," or "one and one-fourth," and recognize how many parts it takes to equal one whole such as four-fourths equals one whole; and

(8)

(9)(A)	find the length of objects using concrete models for standard units of length;	find the length of objects using concrete models for standard units of length such as the edges of inch tiles or centimeter cubes;
(9)(B)	describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object;	describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object such as the longer the unit, the fewer needed and the shorter the unit, the more needed
(9)(F)	use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit; and	use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit such as 24 square units; and
(11)	Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	
(11)(F)	differentiate between producers and consumers and calculate the cost to produce a simple item.	differentiate between producers and consumers and calculate the cost to produce a simple item such as a shirt, a pitcher of lemonade, or a class art project

§111.5,Grade3

	Knowledge and Skill Statement/Student Expectation (as adopted in 2012)	Student Expectation Including Original "Such As" Statement
(2)	<p>Number and operations. The student applies mathematical standards to represent and compare whole numbers and understand relationships related to place value. The student is expected to:</p> <p>represent a number on a number line as being between two</p>	<p>represent a number on a number line as being between two</p>
(2)(C)		



§111.6, Grade 4

	Knowledge and Skill Statement/Student Expectation (as adopted in 2012)	Student Expectation Including Original "Such As" Statement
(2)	Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	
(2)(B)	represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals;	represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals such as in the number 3.94, the 3 in the ones place is 3; the 9 in the tenths place is 0.9; and the 4 in the hundredths place is 0.04; and 3.94 is the sum of 3 ones, 9 tenths, and 4 hundredths;
(3)	Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	
(3)(B)	decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations;	decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations such as $7/8 = 5/8 + 2/8$ ; $7/8 = 3/8 + 4/8$ ; $2 \frac{7}{8} = 1 + 1 + 7/8$ ; $2 \frac{7}{8} = 8/8 + 8/8 + 7/8$
(3)(C)	determine if two given fractions are equivalent using a variety of methods;	determine if two given fractions are equivalent using a variety of methods including multiplying by a fraction equivalent to one or simplifying a fraction to lowest terms
(3)(E)	represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations;	represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line such as strip diagrams and properties of operations;

(5) Algebraic reasoning. The student applies mathematical process



(5)(B)	represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence;	represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule, representing such as given the rule "Add 3" and the starting number 1, use the expressions $1 + 3$ , $2 + 3$ , $3 + 3$ , and so forth to generate a table to represent the relationship of the values in the resulting sequence and their position in the sequence;
(7)	Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:	
(7)(E)	determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures.	decompose angles such as complementary and supplementary angles into two non-overlapping angles to determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures.

§111.7Grade5

Knowledge and Skills Statement/Student Expectation

§111.26 Grade 6

§111.27Grade7

	Knowledge and Skill Statement/Student Expectation (as adopted in 2012)	Student Expectation Including Original "Such As" Statement
(2)	Number and operations. The student applies mathematical process standards to represent and use rational numbers in a variety of forms. The student is expected to extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of rational numbers.	Number and operations. The student applies mathematical process standards to represent and use rational numbers in a variety of forms. The student is expected to extend previous knowledge of sets and subsets using a visual representation such as a Venn diagram to describe relationships between sets of rational numbers.
(4)	Proportionality. The student applies mathematical process standards to represent and solve problems involving proportional relationships. The student is expected to:	
(4)(D)	solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease and financial literacy problems; and	solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems such as tax, tip, discount, simple interest, and commission; and

§111.28 Grade 8

	Knowledge and Skill Statement/Student Expectation (as adopted in 2012)	Student Expectation Including Original "Such As" Statement
(2)	Number and operations. The student applies mathematical process standards to represent and use real numbers in a variety of forms. The student is expected to:	

(2)(A)

Personal financial literacy. The student applies mathematical

(12)