Math Teachers Press, Inc. 4850 Park Glen Road, Minneapolis, MN 55416 phone (800) 852-2435 fax (952) 546-7502 2016 VIRGINIA MATHEMATICS STANDARDS OF LEARNING CORRELATED TO **MOVING WITH MATH FOUNDATIONS LEVEL B - GRADE 4 B2 B**3 **B4 B1 Multiplication &** Numeration, **Multiplication &** Fractions, **Division Basic Division - Problem** Addition & Decimals. Subtraction Facts Solvina Geometrv. **Teacher Guide Teacher Guide Teacher Guide** Measurement Page/Student Book Page/Student Book Page/Student Book **Teacher Guide** Page and Page and Page and Page/Student Book Skill Builders (SB) Skill Builders (SB) Skill Builders (SB) Page and Skill Builders (SB) NUMBER AND NUMBER SENSE 4.1 The student will read, write, and identify the place and value of each 18 a. digit in a nine-digit whole number; **SB:** 6-4 compare and order whole numbers expressed through 5, 6, 16, 19 b. millions; and **SB:** 2-1, 2-2, 2-3, 2-4 round whole numbers expressed through millions to the 26 C. nearest thousand, ten thousand, and hundred **SB:** 8-3 thousand. 4.2 The student will compare and order fractions and mixed numbers, with 4, 12, 13, 15, 20 a. and without models: SB: 32-1, 32-2, 32-4 represent equivalent fractions; and 11, 14 b. **SB:** 32-3 identify the division statement that represents a fraction, c. with models and in context. **SB:** 30-8 4.3 The student will

		B1 Numeration, Addition & Subtraction Teacher Guide Page/Student Book Page and Skill Builders (SB)	B2 Multiplication & Division Basic Facts Teacher Guide Page/Student Book Page and Skill Builders (SB)	B3 Multiplication & Division - Problem Solving Teacher Guide Page/Student Book Page and Skill Builders (SB)	B4 Fractions, Decimals, Geometry, Measurement Teacher Guide Page/Student Book Page and Skill Builders (SB)
а.	read, write, represent, and identify decimals expressed through thousandths;				23-26 SB: 47-11, 47-12, 47-14
b.	round decimals to the nearest whole number;	62 SB: 47-4			SB: 47-16
с.	compare and order decimals; and				28 SB: 47-15
d.	given a model, write the decimal and fraction equivalents.				23, 24, 25, 26 SB: 47-11, 47-12, 47- 14
	COMPUTATION AND ESTIMATION				
4.4	The student will				
а.	demonstrate fluency with multiplication facts through 12 x 12, and the corresponding division facts;		16, 18, 20, 39, 40 SB: 20-8	7, 13 SB: 25-23, 25-26	
b.	estimate and determine sums, differences, and products of whole numbers;		2-6, 8-16, 18, 20, 41- 45, 47, 48, 50-53, 56, 57, 59 SB: 20-1 to 20-5, 20- 16, 21-1, 21-2, 22-1	2-23, 26-35 SB: 20-19 to 20-22, 20-24 to 20-30, 20-	
C.	estimate and determine quotients of whole numbers, with and without remainders; and		21-31, 61-68, 70-74 SB: 25-1 to 25-14, 26-2, 26-3, 26-4	41-49, 52, 53, 55- 66, 69-75 SB: 25-17, 25-23, 25-25, 25-26, 26-9 to 26-13, 27-1 to 27- 3, 28-1 to 28-3	

		B1 Numeration, Addition & Subtraction Teacher Guide Page/Student Book Page and Skill Builders (SB)	B2 Multiplication & Division Basic Facts Teacher Guide Page/Student Book Page and Skill Builders (SB)	B3 Multiplication & Division - Problem Solving Teacher Guide Page/Student Book Page and Skill Builders (SB)	B4 <i>Fractions,</i> <i>Decimals,</i> <i>Geometry,</i> <i>Measurement</i> Teacher Guide Page/Student Book Page and Skill Builders (SB)
d.	create and solve single-step and multistep practical problems involving addition, subtraction, and multiplication, and single-step practical problems involving division with whole numbers.		2-4, 19, 21-28, 33, 34, 36, 37, 41-45, 50, 52, 56, 57, 61- 65, 67, 68, 72-77 SB: 20-2, 20-3, 20- 4, 20-8, 20-12, 20- 13, 20-18, 22-1, 24- 1, 25-1, 25-2, 25-7, 25-8 to 25-12, 26-2, 26-3, 26-4, 26-6, 29- 1, 47-7	2, 3, 5, 10, 14, 15, 17-19, 21, 22, 26- 33, 36, 41, 42, 46, 47, 50, 52, 56, 57, 59, 60, 63, 64, 69-75 SB: 20-19, 20-22, 20-25, 20-27, 20-39, 21-4, 23-4, 25-19, 26-9 to 26-13, 27-1, 27-2, 47-9	
4.5	The student will				
a.	determine common multiples and factors, including			37, 38	
	least common multiple and greatest common factor;			SB: 25-15, 25-16	
b.	add and subtract fractions and mixed numbers having like and unlike denominators; and				17-19, 21, 22 SB: 33-1 to 33-5, 33 10, 34-1, 34-2, 34-3, 34-5, 34-6
d.	solve single-step practical problems involving addition and subtraction with fractions and mixed numbers.				17, 19 SB: 33-3, 33-4, 34- 1, 34-2, 34-4
4.6	The student will				
а.	add and subtract decimals; and	58 SB: 47-2, 47-3			
b.	solve single-step and multistep practical problems involving addition and subtraction with decimals.	58 SB: 47-3			SB: 47-17, 47-18
47	MEASUREMENT AND GEOMETRY				70
4.7	The student will solve practical problems that involve determining perimeter and area in U.S. Customary and metric units.				70 SB: 46-4
4.8	The student will				

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а.	estimate and measure length and describe the result in U.S. Customary and metric units;				56, 57, 62 SB: 43-1, 43-2, 43- 3, 43-4, 43-5
b.	estimate and measure weight/mass and describe the results in U.S. Customary and metric units;				59, 64 SB: 45-2
C.	given the equivalent measure of one unit, identify equivalent measures of length, weight/mass, and liquid volume between units within the U.S. Customary system; and				58, 59, 60 SB: 44-1, 44-22, 45- 1, 45-2
d.	solve practical problems that involve length, weight/mass, and liquid volume in U.S. Customary units.				58, 59, 61
4.9	The student will solve practical problems related to elapsed time in hours and minutes within a 12-hour period.				51 SB: 41-2
4.10	The student will				
a.	identify and describe points, lines, line segments, rays, and angles, including endpoints and vertices; and				29, 30, 31 SB: 35-1 to 35-5
b.	identify and describe intersecting, parallel, and perpendicular lines.				33 SB: 36-2, 36-3
4.11	The student will identify, describe, compare, and contrast plane and solid figures according to their characteristics (number of angles, vertices, edges, and the number and shape of faces), using concrete models and pictorial representations.				35-38, 46-48 SB: 37-3 to 37-8, 40- 1, 40-3, 40-4
4.12	The student will classify quadrilaterals as parallelograms, rectangles, squares, rhombi, and/or trapezoids.				39 SB: 37-6
	PROBABILITY AND STATISTICS				
4.13	The student will				

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a.	determine the likelihood of an outcome of a simple event;				74, 75 SB: 49-5, 49-6
b.	represent probability as a number between 0 and 1, inclusive; and				SB: 49-5
C.	create a model or practical problem to represent a given probability.				
4.14	The student will				
а.	collect, organize, and represent data in bar graphs and line graphs;	68-70 SB: 50-4	49 SB: 50-6		
b.	interpret data represented in bar graphs and line graphs; and	68, 70 SB: 50-3, 50-4			
C.	compare two different representations of the same data (e.g., a set of data displayed on a chart and a bar graph, a chart and a line graph, or a pictograph and a bar graph).	68			
	PATTERNS, FUNCTIONS, AND ALGEBRA				
4.15	The student will identify, describe, create, and extend patterns found in objects, pictures, numbers, and tables.	8-11 SB: 3-2		14 SB: 3-4	
4.16	The student will recognize and demonstrate the meaning of equality in an equation.	29, 38, 41, 52, 53 SB: 14-2, 19-2		78 SB: 29-3	