



Math Teachers Press, Inc.

4850 Park Glen Road, Minneapolis, MN 55416
 phone (800) 852-2435 fax (952) 546-7502

NEW--2009

VIRGINIA MATHEMATICS STANDARDS OF LEARNING CORRELATED TO *MOVING WITH MATH EXTENSIONS Grade 7*

		Student Book	Skill Builders
NUMBER AND NUMBER SENSE			
7.1	The student will		
a.	investigate and describe the concept of negative exponents for powers of ten;		
b.	determine scientific notation for numbers greater than zero;		
c.	compare and order fractions, decimals, percents, and numbers written in scientific notation;	25	11-4
d.	determine square roots; and		
e.	identify and describe absolute value for rational numbers.		48-2
7.2	The student will describe and represent arithmetic and geometric sequences, using variable expressions.		
COMPUTATION AND ESTIMATION			
7.3	The student will		
a.	model addition, subtraction, multiplication, and division of integers; and		
b.	add, subtract, multiply, and divide integers.		
7.4	The student will solve single-step and multistep practical problems, using proportional reasoning.	49, 51	46-2
MEASUREMENT			
7.5	The student will		
a.	describe volume and surface area of cylinders;		
b.	solve practical problems involving the volume and surface area of rectangular prisms and cylinders; and		
c.	describe how changing one measured attribute of a rectangular prism affects its volume and surface area.		
7.6	The student will determine whether plane figures--quadrilaterals and triangles--are similar and write proportions to express the relationships between corresponding sides of similar figures.		
GEOMETRY			
7.7	The student will compare and contrast the following quadrilaterals based on properties: parallelogram, rectangle, square, rhombus, and trapezoid.		

		Student Book	Skill Builders
7.8	The student, given a polygon in the coordinate plane, will represent transformations (reflections, dilations, rotations, and translations) by graphing in the coordinate plane.		
PROBABILITY AND STATISTICS			
7.9	The student will investigate and describe the difference between the experimental probability and theoretical probability of an event.		
7.10	The student will determine the probability of compound events, using the Fundamental (Basic) Counting Principle.		
7.11	The student, given data for a practical situation, will		
a.	construct and analyze histograms; and		
b.	compare and contrast histograms with other types of graphs presenting information from the same data set.		
PATTERNS, FUNCTIONS, AND ALGEBRA			
7.12	The student will represent relationships with tables, graphs, rules, and words.	16	
7.13	The student will		
a.	write verbal expressions as algebraic expressions and sentences as equations and vice versa; and		50-1
b.	evaluate algebraic expressions for given replacement values of the variables.		
7.14	The student will		
a.	solve one- and two-step linear equations in one variable; and	22	
b.	solve practical problems requiring the solution of one- and two-step linear equations.		
7.15	The student will		
a.	solve one-step inequalities in one variable; and		
b.	graph solutions to inequalities on the number line.		
7.16	The student will apply the following properties of operations with real numbers:		
a.	the commutative and associative properties for addition and multiplication;	5	2-1
b.	the distributive property;		2-2
c.	the additive and multiplicative identity properties;		
d.	the additive and multiplicative inverse properties; and	21	
e.	the multiplicative property of zero.		