



# Math Teachers Press, Inc.

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

1/07

## NORTH CAROLINA COURSE OF STUDY CORRELATED TO *MOVING WITH MATH® EXTENSIONS GRADE 8*

		Student Book	Skill Builders
<b>STRANDS: NUMBER AND OPERATIONS, MEASUREMENT, GEOMETRY, DATA ANALYSIS AND PROBABILITY, ALGEBRA</b>			
<b>Competency Goal 1: The learner will understand and compute with real numbers.</b>			
1.01	Develop number sense for the real numbers.	2-39	
a.	Define and use irrational numbers		
b.	Compare and order.		
c.	Use estimates of irrational numbers in appropriate situations.		
1.02	Develop flexibility in solving problems by selecting strategies and using mental computation, estimation. Calculators or computers, and paper and pencil.	10, 11	43-1, 43-2
<b>Competency Goal 2: The learner will understand and use measurement concepts.</b>			
2.01	Determine the effect on perimeter, area, or volume when one or more dimensions of two- and three-dimensional figures are changed.	59, 61, 64	38-1, 56-1
2.02	Apply and use concepts of indirect measurement.	51, 54, 55, 60, 61	39-1, 52-2, 54-1
<b>Competency Goal 3: The learner will understand and use properties and relationships in geometry.</b>			
3.01	Represent problem situations with geometric models.	58-67	34-1, 38-1, 39-1, 40-1, 41-1, 55-1, 55-2, 56-1
3.02	Apply geometric properties and relationships, including the Pythagorean Theorem, to solve problems.	46-54	32-1, 32-2, 33-1, 52-2, 53-1
3.03	Identify, predict, and describe dilations in the coordinate plane.	70	49-1
<b>Competency Goal 4: The learner will understand and use graphs and data analysis.</b>			
4.01	Collect, organize, analyze, and display data (including scatterplots) to solve problems.	70	49-1

		Student Book	Skill Builders
4.02	Approximate a line of best fit for a given scatterplot; explain the meaning of the line as it relates to the problem and makes predictions.		
4.03	Identify misuses of statistical and numerical data.		
	<b>Competency Goal 5: The learner will understand and use linear relations and functions.</b>		
5.01	Develop an understanding of function.	T.G. pp. 40, 56, 57	42-1
a.	Translate among verbal, tabular, graphic, and algebraic representations of functions.	T.G. p. 16, 70	49-1
b.	Identify relations and functions as linear or nonlinear.		
c.	Find, identify, and interpret the slope (rate of change) and intercepts of a linear relation.		
d.	Interpret and compare properties of linear functions from tables, graphs, or equations.	75-78	50-1, 50-2
5.02	Write an equation of a linear relationship given: two points, the slope and one point on the line, or the slope and y-intercept.		
5.03	Solve problems using linear equations and inequalities; justify symbolically and graphically.	78-80	50-1 to 50-3
5.04	Solve equations using the inverse relationships of addition and subtraction, multiplication and division, squares and square roots, and cubes and cube roots.	71-74	58-1 to 58-4