1/07

NORTH CAROLINA COURSE OF STUDY CORRELATED TO
MOVING WITH ALGEBRA GRADE 7

		Part A Student Book Skill Builders (SB)	Part B Student Book Skill Builders (SB)
	STRANDS: NUMBER AND OPERATIONS, MEASUREMENT, GEOMETRY, DATA ANALYSIS AND PROBABILITY, ALGEBRA		
	Competency Goal 1: The learner will understand and compute with rational numbers.		
1.01	Develop and use ratios, proportions, and percents to solve problems.	122, 173-179 SB: 102, 133, 136-138	220-222, 225-227, 275-278 SB: 187-189, 191, 192, 222, 223
1.02	Develop fluency in addition, subtraction, multiplication, and division of rational numbers.	94-96, 98-102, 107-115 SB: 73-83, 90-99	
a.	Analyze computational strategies.	93, 100, 107, 108 113 SB: 77, 78, 89, 96	
b.	Describe the effect of operations on size.	100, 107, 113 SB: 93, 96	
c.	Estimate the results of computations.	103, 104, 105, 117, 158 SB: 84-86, 100	
d.	Judge the reasonableness of solutions.	105, 118 SB: 87, 88	
1.03	Develop flexibility in solving problems by selecting strategies and using mental computation, estimation, calculators or computers, and paper and pencil.	32-35, 54, 55, 58, 59, 105, 106, 116, 145, 158-160 SB: 27, 46, 51-53, 87	273, 274 SB: 204, 217, 218, 245
	Competency Goal 2: The learner will understand and use measurement involving two- and three-dimensional figures.		
2.01	Draw objects to scale and use scale drawings to solve problems.		226, 227 SB: 191, 192

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2.02	Solve problems involving volume and surface area of cylinders, prisms, and composite shapes.		212-214 **SB:** 180-182
	Competency Goal 3: The learner will understand and use properties and relationships in geometry.		
3.01	Using three-dimensional figures:		
a.	Identify, describe, and draw from various views (top, side, front, corner).		192, 193 **SB:** 161, 162
b.	Build from various views.		193 **SB:** 162
c.	Describe cross-sectional views.		
3.02	Identify, define, and describe similar and congruent polygons with respect to angle measures, length of sides, and proportionality of sides.		203, 223, 224 **SB:** 169, 170, 190
3.03	Use scaling and proportional reasoning to solve problems related to similar and congruent polygons.		225-227 **SB:** 189
	Competency Goal 4: The learner will understand and use graphs and data analysis.		
4.01	Collect, organize, analyze and display data (including box plots and histograms) to solve problems.	56, 57 **SB:** 47-50	
4.02	Calculate, use, and interpret the mean, median, mode, range, frequency distribution, and inter-quartile range for a set of data.	56, 57 **SB:** 47-50	
4.03	Describe how the mean, median, mode, range, frequency distribution, and inter-quartile range of a set of data affect its graph.		
4.04	Identify outliers and determine their effect on the mean, median, mode, and range of a set of data.		
4.05	Solve problems involving two or more sets of data using appropriate statistical measures.	**SB:** 50	
	Competency Goal 5: The learner will demonstrate an understanding of linear relations and fundamental algebraic concepts.		
5.01	Identify, analyze, and create linear relations, sequences, and functions using symbols, graphs, tables, diagrams, and written descriptions.		231, 232, 307-309 **SB:** 196, 197, 234, 235
5.02	Translate among different representations of algebraic expressions, equations and inequalities.		249-252, 262-265, 281-287 **SB:** 208-210, 220, 225

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5.03	Use and evaluate algebraic expressions, linear equations or inequalities to solve problems.		255-261, 266, 267, 270-274, 279, 280, 284 **SB:** 212-219, 221, 224, 225, 245
5.04	Develop fluency in the use of formulas to solve problems.		207-214, 279, 280 **SB:** 176, 177, 179-182, 224