

Jones County School District
PACING GUIDE
Compacted 8th Grade Mathematics

Subject Name: Compacted 8 th Grade Mathematics CCRS	1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
The Number System				
A. Know that there are numbers that are not rational, and approximate them by rational numbers. (1-3, 1-4)	X			
Expressions and Equations				
A. Work with radicals and integer exponents. (7-1,7-2,7-3,7-4,7-5)			X	
B. Understand the connections between proportional relationships, lines and linear equations. (2-7)	X			
C. Analyze and solve linear equations and pairs of simultaneous linear equations. (6-1,6-2,6-3,6-4)	X			
Functions				
A. Define, evaluate and compare functions. (4-6,4-7)		X		
B. Use functions to model relationships between quantities. (5-2,5-7)		X		
Geometry				
A. Understand congruence and similarity using physical models, transparencies or geometry software.				X
B. Understand and apply the Pythagorean Theorem. (10-1)				X
C. Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.				X
Statistics and Probability				
A. Investigate patterns of association in bivariate data. (12-1,12-4)				X

The Real Number System (N-RN) B. Use properties of rational and irrational numbers (3). (1-3,1-4)	X			
Quantities* (N-Q) A. Reason quantitatively and use units to solve problems (1, 2, 3). (2-6,2-9,2-10,4-5)	X			
Seeing Structure in Expressions (A-SSE) A. Interpret the structure of expressions (1, 2). (1-7,8-5,8-6,8-7,8-8)	X		X	
B. Write expressions in equivalent forms to solve problems (3).	X			
Arithmetic with Polynomials and Rational Expressions (A-APR) A. Perform arithmetic operations on polynomials (1). (8-1,8-2,8-3,8-4)			X	
B. Understand the relationship between zeros and factors of polynomials (3). (8-1,8-2,8-3,8-4)			X	
Creating Equations* (A-CED) A. Create equations that describe numbers or relationships (1, 2, 3, 4). ((1-8,2-1,2-3,5-2,5-5,11-5)	X		X	X
Reasoning with Equations and Inequalities (A-REI) A. Understand solving equations as a process of reasoning and explain the reasoning (1) (1-9,2-2)	X			
B. Solve equations and inequalities in one variable (3, 4) (2-2,3-1,3-2,3-3,3-4,3-5,3-6,9-3,9-4,9-5,9-6)	X	X	X	
C. Solve systems of equations (5, 6). (6-1,6-2,6-3,6-4)			X	
D. Represent and solve equations and inequalities graphically (10, 11, 12) (4-2,4-3,6-5,6-6)		X	X	

Interpreting Functions (F-IF)				
A. Understand the concept of a function and use function notation (1, 2, 3) (4-6,4-7)		X		
B. Interpret functions that arise in applications in terms of the context (4, 5, 6) (4-1,4-4,11-6,11-7)		X		X
C. Analyze functions using different representations (7, 8, 9) (5-3,7-6,7-7,9-1,9-2,10-5)		X	X	X
Building Functions (F-BF)				
A. Build a function that models a relationship between two quantities (1) (5-5)		X		
B. Build new functions from existing functions (3) (5-8)		X		
Linear, Quadratic, and Exponential Models* (F-LE)				
A. Construct and compare linear, quadratic, and exponential models and solve problems (1, 2, 3) (5-1,5-4,9-7)		X	X	
B. Interpret expressions for functions in terms of the situation they model (5) (Chapter 5)		X		
Interpreting Categorical and Quantitative Data (S-ID)				
A. Summarize, represent, and interpret data on a single count or measurement variable (1, 2, 3) (12-2,12-3,12-4)				X
B. Summarize, represent, and interpret data on two categorical and quantitative variables (5, 6) (5-7)		X		
C. Interpret linear models (7, 8, 9) (Chapter 5)		X		