

Math Timeline for Grade 8

Macon County 2017-18

1st 9 Weeks

Standard	Learning Target	Resources	T	M
8.NS.A.1 A. Know that there are numbers that are not rational, and approximate them by rational numbers.	I can solve problems converting repeating decimal numbers to a rational number. (S)			
	I can justify why some decimal numbers are rational while others are irrational. (R)			
	I can define rational and irrational numbers. (K)			
	I can determine the difference between rational and irrational numbers. (K)			
8.NS.A.2 A. Know that there are numbers that are not rational, and approximate them by rational numbers.	I can locate irrational numbers on a number line. (K)			
	I can convert irrational numbers to their decimal equivalents. (S)			
8.EE.A.1 A. Work with radicals and integer exponents.	I can solve multiplication and division problems involving integer exponents. (S)			
	I can state the properties of integer exponents. (K)			
8.EE.A.2 A. Work with radicals and integer exponents.	I can classify non-perfect squares as irrational. (S/R)			
	I can evaluate cube roots of perfect cubes. (R)			
	I can evaluate square roots of perfect squares. (R)			
8.EE.A.3 A. Work with radicals and integer exponents.	I can compare numbers written in scientific notation by estimating using powers of 10. (R)			
8.EE.A.4 A. Work with radicals and integer exponents.	I can convert numbers written in standard form to scientific notation or scientific notation to standard form. (S)			
	I can perform operations with numbers expressed in			

	scientific notation. (S)			
--	--------------------------	--	--	--

Standard	Learning Target	Resources	T	M
8.EE.B.5 B. Understand the connections between proportional relationships, lines, and linear equations.	I can graph proportional relationships. (S)			
	I can compare two different proportional relationships in different ways. Ex: distance-time; time-distance. (P)			
	I can describe what is meant by slope. (K)			
	I can interpret the unit rate as the slope of a graph. (R)			
	I can develop a proportional relationship. (P)			
8.EE.B.6 B. Understand the connections between proportional relationships, lines, and linear equations.	I can generate an equation ($y = mx$) for a line through the origin. (S)			
	I can justify why the slope is the same between any two points on a line. (R)			
	I can identify similar triangles on a graph. (K)			
2nd 9 WEEKS				
8.EE.C.7 C. Analyze and solve linear equations and systems of two linear equations.	I can give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. (R)			
	I can solve linear equations with rational number coefficients. (S)			
	I can distinguish the difference between like and unlike terms. (R)			
	I can restate an equation using distributive property. (K)			
8.EE.C.8 C. Analyze and solve linear equations and systems of two linear equations.	I can demonstrate how an ordered pair can satisfy two equations at the same time. (R)			

	I can graph two linear equations and find their point of intersection. (S)			
	I can solve systems of two linear equations in two variables – algebraically. (S)			
	I can estimate solutions by graphing the equations. (S)			
	I can solve simple systems of two linear equations by inspection. (S)			
	I can solve real-world linear equation problems in two variables. (S)			
	I can determine if the line intersects through the second pair of points. (R)			

Standard	Learning Target	Resources	T	M
8.F.A.1 A. Define, evaluate, and compare functions.	I can graph a function. (P)			
	I can recognize that a function has exactly one output for each input. (K)			
	I can define what a function is. (K)			
8.F.A.2 A. Define, evaluate, and compare functions.	I can determine which function has the greater rate of change. (R)			
	I can recognize that functions are represented in different ways. (K)			
	I can compare properties of two functions. (R)			
8.F.A.3 A. Define, evaluate, and compare functions.	I can classify which equations are linear and nonlinear. (R/S)			
	I can construct a straight line using the equation: $y=mx+b$. (P)			
	I can define a linear function using $y=mx+b$. (K)			
	I can interpret the equation $y=mx+b$. (R)			
8.F.B.4 B. Use functions to model relationships between quantities.	I can organize function according to their relationship description or from their (x,y) values. (S)			
	I can determine the rate of change and initial value of a function. (R)			
	I can construct a function with a linear relationship between two quantities. (P)			

8.F.B.5 B. Use functions to model relationships between quantities.	I can describe the functional relationship between two quantities. (K)			
	I can analyze a graph containing two quantities. (R)			
	I can sketch a graph with distinctive features of functions. (P)			
8.G.B.4 B. Understand and apply the Pythagorean Theorem.	I can prove the Pythagorean Theorem. (R)			
	I can prove the converse of the Pythagorean Theorem. (R)			
8.G.B.5 B. Understand and apply the Pythagorean Theorem.	I can apply the Pythagorean Theorem to find unknown side lengths in right triangles in real world and mathematical problems in two and three dimensions. (S)			
	I can apply the Pythagorean Theorem to find unknown side lengths of right triangles in real world problems in 2-dimensional shapes. (S)			
8.G.B.6 B. Understand and apply the Pythagorean Theorem.	I can apply the Pythagorean Theorem to find the distance between two points in a coordinate system. (S)			
	I can apply the angle sum theorem when working with triangles. (S)			
	I can identify angles formed by parallel lines and a transversal. (K)			
8.G.A.3 A. Understand and describe the effects of transformations on two dimensional figures and use informal arguments to establish facts about angles.	I can justify the angle-angle criterion for similarity of triangles. (R) I can apply the angle sum theorem when working with triangles. (S) I can identify angles formed by parallel lines and a transversal. (K)			

3th 9 Weeks

Standard	Learning Target	Resources	T	M
8.SP.A.1	I can describe/identify patterns of scatter plots. Ex: clustering, outliers,			

A. Investigate patterns of association in bivariate data.	positive or negative association, and non-linear association. (K)		
	I can distinguish between patterns on the scatter plot. (R)		
	I can interpret scatter plots. (R)		
	I can construct scatter plots. (P)		
8.SP.A.2 A. Investigate patterns of association in bivariate data.	I can determine the appropriateness of a line of best fit for a given scatter plot. (R)		
	I can construct a line of best fit for a given scatter plot. (P)		
	I can recognize that straight lines model relationships between two variables. (K)		
8.SP.A.3 A. Investigate patterns of association in bivariate data.	I can interpret the meaning of slope and y-intercept in a real-world situation. (R)		
8.SP.B.4 B. Investigate chance processes and develop, use, and evaluate probability models	I can find the probabilities of compound events using organized lists, tables, tree diagrams, and simulation. I can identify the outcomes for an event described in everyday language.		
8.G.C.7 C. Solve real-world and mathemati cal problems involving volume of	I can solve real-world problems involving volume of cones, cylinders, and spheres. (K)		

cylinders, cones, and spheres.				
	I can recite the formulas for the volumes of cones, cylinders, and spheres. (K)			

4th 9 WEEKS

REVIEW AND TESTING

