

Mathematics Curriculum: 2018/2019 - Grade 8

Month	Chapter	Sections and Common Core Standards	Topic
August/September	Chapter 1: Solving Equations	Chapter Opener	Review of previous content
		1.1 – Solving Simple Equations: 8.EE.7b	1.1 – Activity, Lesson
		1.2 – Solving Multi-Step Equations: 8.EE.7b	1.2 – Activity, Lesson
		1.3 – Solving Equations with Variables on Both Sides: 8.EE.7a, 8.EE.7b	1.3 – Activity, Lesson
		1.3b – Solutions of Linear Equations	1.3b - Lesson
		Study Help / Quiz - 1.1-1.3 (quiz knowledge of the rules)	Quiz in assessment book (online)
		1.4 – Rewriting Equations and Formulas: 8.EE.7b	1.4 – Activity, Lesson
		1.5 – Converting Units of Measure: 8.EE.5	1.5 – Activity, Lesson
		Chapter Review / Quiz – 1.4-1.5 (quiz the rules)	Online (Schoolology/weekend)
		Standardized test prep	Take home due in class for discussion and grading
		Chapter 1 test	
September/October	Chapter 2: Graphing Linear Equations and Linear Systems	Chapter Opener	Review of previous content (Home)
		2.1 – Graphing Linear Equations: 8.EE.8a, 8.SP.3	2.1 – Activity, Lesson
		2.2 – Slope of a Line: 8.EE.5, 8.EE.6	2.2 – Activity, Lesson
		2.2b – Triangles and Slope	2.2b - Lesson
		2.3 – Graphing Linear Equations in Slope-Intercept Form: 8.EE.6	2.3 – Activity, Lesson
		2.4 – Graphing Linear Equations in Standard Form: 8.EE.6	2.4 – Activity, Lesson
		Study Help / Quiz 2.1 – 2.4	Quiz in assessment book (online)
		2.5 – Systems of Linear Equations: 8.EE.8a/b/c	2.5 – Activity, Lesson
		2.6 – Special Systems of Linear Equations: 8.EE.8a/b/c	2.6 – Activity, Lesson
		2.7 – Solving Equations by Graphing: 8.EE.8a/b/c	2.7 – Lesson, Activity
		Chapter Review / Quiz – 2.5 – 2.7	Online (Schoolology/weekend)
		Standardized test prep	Take home due in class for discussion and grading
		Chapter 2 Test	
		October	Chapter 3: Writing Linear Equations and Linear Systems
3.1 – Writing Equations in Slope-Intercept Form: 8.EE.6	3.1 – Activity, Lesson		
3.2 – Writing Equations Using a Slope and a Point: 8.EE.6, 8.F.4	3.2 – Activity, Lesson		

		3.3 – Writing Equations Using Two points: 8.F.4	3.3 – Activity, Lesson
		Study Help / Quiz 3.1-3.3	Quiz in assessment book (online)
		3.4 – Solving Real-Life Problems: 8.EE.6, 8.F.4	3.4 – Activity, Lesson
		3.5 – Writing Systems of Linear Equations: 8.EE.8a/b/c	3.5 – Activity, Lesson
		Chapter Review / Quiz – 3.4 - 3.5	Online (Schoology-weekend)
		Standardized test prep	Take home due in class for discussion and grading
		Chapter 3 Test	
October/November	Chapter 4: Functions	Chapter Opener	Review of previous content (Home)
		4.1 – Domain and Range of a Function: 8.F.1	4.1 – Activity, Lesson
		4.2 – Discrete and Continuous Domains: 8.F.1, 8.F.2	4.2 – Activity, Lesson
		Study Help / Quiz – 4.1-4.2	Quiz in assessment book (online)
		4.3 – Linear function Patterns: 8.F.3, 8.F.4	4.3 – Activity, Lesson
		4.4 – Comparing Linear and Nonlinear Functions: 8.EE.5, 8.F.3, 8.F.5	4.4 – Activity, Lesson
		4.4b – Comparing Rates	4.4b - Lesson
		Chapter Review / Quiz – 4.3-4.4	Online (Schoology)
		Standardized test prep	Take home due in class for discussion and grading
		Chapter 4 Test	
November	Chapter 5: Angles and Similarity	Chapter Opener	Review of previous content (Home)
		5.1 – Classify Angles: 8.G.5	5.1 – Activity, Lesson
		5.2 – Angles and Sides of Triangles: 8.G.5	5.2 – Activity, Lesson
		5.3 – Angles of Polygons: 8.G.5	5.3 – Activity, Lesson
		Study Help / Quiz – 5.1-5.3	Quiz in assessment book (online)
		5.4 – Using Similar Triangles: 8.G.5	5.4 – Activity, Lesson
		5.5 – Parallel Lines and Transversals: 8.G.5	5.5 – Activity, Lesson
		Transformations	Resource
		Chapter Review / Quiz – 5.4-5.5	Online (Schoology)
		Standardized test prep	Take home due in class for discussion and grading
		Chapter 5 Test	
December	Chapter 6: Square Roots and the Pythagorean Theorem	Chapter Opener	Review of previous content
		6.1 – Finding Square Roots: 8.EE.2	6.1 – Activity, Lesson
		6.2 – The Pythagorean Theorem: 8.G.6, 8.G.7	6.2 – Activity, Lesson
		Study Help / Quiz – 6.1-6.2	Quiz in assessment book (online)
		6.3 – Approximating Square Roots: 8.EE.2, 8.NS.1/2	6.3 - Activity, Lesson
		6.3b – Real Numbers	6.3b –Lesson
		6.4 – Simplifying Square Roots: 8.NS.2	6.4 – Activity, Lesson

		6.5 – Using Pythagorean Theorem: 8.G.6/7/8	6.5 – Activity, Lesson
		Chapter Review / Quiz – 6.3-6.5	Online (Schoology)
		Standardized test prep	Take home due for class discussion
		Chapter 6 Test	
January	Chapter 7: Data Analysis and Displays	Chapter Opener	Review of previous content - online
		7.1 – Measures of Central Tendency: 8.SP.1	7.1 – Activity, Lesson
		7.2 – Box-and-Whisker Plots: 8.SP.1	7.2 – Activity, Lesson
		Study Help / Quiz-7.1-7.2	Quiz in assessment book (online)
		7.3 – Scatter Plots and Lines of Best Fit: 8.SP.1/2/4	7.5 – Activity, Lesson
		7.3b – Two-Way Tables	7.3b - Lesson
		7.4 – Choosing a Data Display: 8.SP.1	7.6 – Activity, Lesson
		Chapter Review / Quiz – 7.3-7.4	Online (Schoology)
		Standardized test prep	Take home due in class for discussion and grading
January/February	Chapter 8: Linear Inequalities (Regents Topic)	Chapter Opener	Review of previous content - online
		8.1 – Writing and Graphing Inequalities: 8.EE.7a	8.1 – Activity, Lesson
		8.2 – Solving Inequalities Using Addition or Subtraction: 8.EE.7b	8.2 – Activity, Lesson
		Study Help / Quiz – 8.1-8.2	Quiz in assessment book (online)
		8.3 – Solving Inequalities Using Multiplication and Division: 8.EE.7b	8.3 – Activity, Lesson
		8.4 – Solving Multi-Step Inequalities: 8.EE.7b	8.4 – Activity, Lesson
		Chapter Review / Quiz – 8.3-8.4	Online (Schoology)
		Standardized test prep	Take home due in class for discussion and grading
February	Chapter 9: laws of exponents and scientific notation	Chapter Opener	Review of previous content
		9.1 – Exponents	9.1 – Activity, Lesson
		9.2 – Product of Powers Property	9.2 – Activity, Lesson
		9.3 – Quotient of Powers Property	9.3 – Activity, Lesson
		Study Help / Quiz	Quiz in assessment book (online)
		9.4 – Zero and Negative Exponents	9.4 – Activity, Lesson
		9.5 – Reading Scientific Notation	9.5 – Activity, Lesson
		9.6 – Writing Scientific Notation	9.6 – Activity, Lesson
		9.6b – Scientific Notation	9.6b – Lesson
		Chapter Review / Quiz – 9.4 – 9.5	Online (Schoology)
		Standardized test prep	Take home due in class for discussion and grading

		Chapter 9 Test	
March	Volume	8.G.9 Cylinders, cones, spheres, and combination solids	Resource
March/April	Curriculum Review Regents Curriculum	Test prep practice and review for New York State Math Assessment and Regents Topics	Engage NY and other resource
May	ITBS	Union wide ITBS testing	
May	NYS Testing	Math state test based on Common Core curriculum	
	Polynomial Equations and Factoring	Polynomials, Adding and subtracting Polynomials, Multiplying Polynomials, Factoring Polynomials, using GCF and Factoring equations in the form $x^2 + bx + c$	Text – Big Ideas Math: Algebra 1- Chapter 7
	Graphing Quadratic Functions,	Graphing $y = ax^2 + bx + c$, comparing linear, exponential (see chapter 6.4), and quadratic functions	Text – Big Ideas Math: Algebra 1- Chapter 8
	Graphing inequalities and set theory	Graph linear inequalities and understand basic set theory	Resources (Online and Print)
June	Finals Review		
June	Finals	Test - Chapter 9, and Chapter 7, 8 (Big Ideas Algebra 1)	

Topics: These will be covered in conjunction with modules on www.EngageNY.org Assignments will be given from site along with question palette for the week

Ready New York: Lesson to be assigned weekly and completed on loose leaf.

Project: 20%.

Quizzes: Weekly (most times).

Test Prep: Practice assignments will be given at the end of each chapter.

Students will be required to produce work on time: Late work will be penalized 5 % for each day late unless there is a valid written excuse by the parent or a doctor.

Makeup: If makeups are given the maximum possible score will be 70%