

Grade 7 Mathematics Advanced

2015 – 2016

Please Note:

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Publisher Resource:

Go Math - My.hrw.com

Username: 55S(student ID)

Password: FL + mmddyyyy of birth

Other Course Supplemental Resources – by standard and Topic:

[IXL Math – Grade 7 Standards](#)

[IXL Math – Grade 8 Standards](#)

[Study Island](#)

Login: 55s(student #)

Password: first initial first name + first initial last name + mmddyyyy of birth

FSA Practice: (Please Note: these links work best in Firefox or Chrome)

[FSA Portal](#)

[PARCC](#)

[Smarter Balanced Portal](#)

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	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 16	1	• Unit 0 • Prerequisite Skills - May include long division, operations with integers, solving linear equations. • Assessment • Unit 1 - Expressions and Equations • Module 1 – Expressions and Equations - Lesson 1.1 - Algebraic Expressions	Unit 0 - Khan Academy Lesson 1.1 – Khan Academy
	2	• Unit 1 - Expressions and Equations • Lesson 1.1 - Algebraic Expressions • Lesson 1.2 - One-Step Equations with Rational Coefficients	Lesson 1.2 – Khan Academy
	3	• Unit 1 - Expressions and Equations • Module 1 - Lesson 1.3 Writing Two-Step Equations • Lesson 1.4 - Solving Two-Step Equations • Assessment • Module 2 – Inequalities – Lesson 2.1 Writing and Solving One-Step Inequalities	Lesson 1.3 – Khan Academy Lesson 1.3 – Khan Academy Lesson 2.1 – Khan Academy
	4	• Unit 1 - Expressions and Equations • Lesson 2.2 - Writing Two-Step Inequalities • Lesson 2.3 - Solving Two-Step Inequalities • Assessment	Lesson 2.2 – Khan Academy Lesson 2.3 – Khan Academy
	5	• Unit 2 - Geometry • Module 3- Modeling Geometric Figures – Lesson 3.1 Similar Shapes and Scale Drawings • Lesson 3.3 - Cross Sections • Lesson 3.4 - Angle Relationships	Lesson 3.3 – Khan Academy Lesson 3.4 – Khan Academy
	6	• Unit 2 - Geometry • Lesson 3.2 - Geometric Drawings • Assessment • Module 4 – Circumference, Area, and Volume – Lesson 4.1 Circumference	Lesson 3.2 – Khan Academy Lesson 4.1 – Khan Academy
	7	• Unit 2 - Geometry • Lesson 4.2 - Area of Circles • Lesson 4.3 - Area of Composite Figures • Lesson 4.4 - Solving Surface Area Problems	Lesson 4.2 – Khan Academy Lesson 4.3 – Khan Academy Lesson 4.4 – Khan Academy Lesson 4.5 – Khan Academy

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		Lesson 4.5 - Solving Volume Problems	
	8	Unit 2 - Geometry - Lesson 4.5 - Solving Volume Problems - Assessment Unit 3 - Statistics and Sampling - Module 5 – Random Samples and Populations – Lesson 5.1 Populations and Samples	Lesson 5.1 – Khan Academy
	9	Unit 3 - Statistics and Sampling - Lesson 5.2 - Making Inferences from a Random Sample - Module 6 – Analyzing and Comparing Data – Lesson 6.1 Comparing Data Displayed in Dot Plots - Lesson 6.2 - Comparing Data Displayed in Box Plots	Lesson 5.2 – Khan Academy Lesson 6.1 – Khan Academy Lesson 6.2 – Khan Academy
	10	Unit 3 - Statistics and Sampling - Lesson 6.2 - Comparing Data Displayed in Box Plots - Quarter Assessment	

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	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 19 – Dec 18	1	• Unit 3 - Statistics and Sampling • Lesson 6.3 - Using Statistical Measures to Compare Populations • Assessment	Lesson 6.3 – Khan Academy
	2	• Unit 4 - Probability • Module 7 – Experimental Probability – Lesson 7.1 Probability • Lesson 7.2 - Experimental Probability of Simple Events • Lesson 7.3 - Experimental Probability of Compound Events • Module 8 – Theoretical Probability and Simulations – Lesson 8.1 Theoretical Probability of Simple Events • Lesson 8.2 Theoretical Probability of Compound Events	Lesson 7.1 – Khan Academy Lesson 7.2 – Khan Academy Lesson 7.3 – Khan Academy Lesson 8.1 – Khan Academy Lesson 8.2 – Khan Academy
	3	• Unit 2 - Probability • Lesson 7.4 - Making Predictions with Experimental Probability • Lesson 8.3 - Making Predictions with Theoretical Probability • Lesson 8.4 - Using Technology to Conduct a Simulation • Assessment	Lesson 7.4 – Khan Academy Lesson 8.3 – Khan Academy Lesson 8.4 – Khan Academy
	4	• Unit 5 - Real Numbers, Exponents, and Scientific Notation • Module 9 – Real Numbers – Lesson 9.1 Rational and Irrational Numbers • Lesson 9.2 - Sets of Real Numbers	Lesson 9.1 - Khan Academy Lesson 9.2 - Khan Academy
	5	• Unit 5 - Real Numbers, Exponents, and Scientific Notation • Lesson 9.3 - Ordering Real Numbers • Assessment • Module 10 – Exponents and Scientific Notation – Lesson 10.1 Integer Exponents	Lesson 9.3 - Khan Academy Lesson 10.1 - Khan Academy
	6	• Unit 5 - Real Numbers, Exponents, and Scientific Notation • Lesson 10.1 - Integer Exponents	
	7	• Unit 5 - Real Numbers, Exponents, and Scientific Notation • Lesson 10.2 - Scientific Notation with Positive Powers of 10 • Lesson 10.3 - Scientific Notation with Negative Powers of 10 • Lesson 10.4 - Operations with Scientific Notation	Lesson 10.2 - Khan Academy Lesson 10.3 - Khan Academy Lesson 10.4 - Khan Academy
	8	• Unit 5 - Real Numbers, Exponents, and Scientific Notation • Lesson 10.4 - Operations with Scientific Notation	

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		• Assessments
	9	• Unit 5 - Real Numbers, Exponents, and Scientific Notation • Lesson 10.4 - Operations with Scientific Notation • Semester Assessment

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Quarter 3 Jan 5 – Mar 18	Week	Major Concepts / Topics	Possible Resources
	1	Unit 6 - Proportional and Nonproportional Relationships and Functions - Module 11 – Proportional Relationships – Lesson 11.1 Representing Proportional Relationships - Lesson 11.2 - Rate of Change and Slope	Lesson 11.1 - Khan Academy Lesson 11.2 - Khan Academy
	2	Unit 4 - Proportional and Nonproportional Relationships and Functions - Lesson 11.3 - Interpreting the Unit Rate - Assessment	Lesson 11.3 - Khan Academy
	3	Unit 6 - Proportional and Nonproportional Relationships and Functions - Module 12 – Nonproportional Relationships - Lesson 12.1 - Representing Linear Nonproportional Relationships - Lesson 12.2 - Determining Slope and y-intercept - Lesson 12.3 - Graphing Linear Nonproportional Relationships Using Slope and y-intercept - Lesson 12.4 - Proportional and Nonproportional Situations	Lesson 12.1 - Khan Academy Lesson 12.2 - Khan Academy Lesson 12.3 - Khan Academy Lesson 12.4 - Khan Academy
	4	Unit 6 - Proportional and Nonproportional Relationships and Functions - Assessment - Module 13 - Writing Linear Equations – Lesson 13.1 - Writing Linear Equations from Situations and Graphs - Lesson 13.2 - Writing Linear Equations from a Table	Lesson 13.1 - Khan Academy Lesson 13.2 - Khan Academy
	5	Unit 6 - Proportional and Nonproportional Relationships and Functions - Lesson 13.3 - Linear Relationships and Bivariate Data - Assessment	Lesson 13.3 – Khan Academy
	6	Unit 6 - Proportional and Nonproportional Relationships and Functions - Module 14 - Functions – Lesson 14.1 - Identifying and Representing Functions - Lesson 14.2 - Describing Functions - Lesson 14.3 - Comparing Functions - Lesson 14.4 - Analyzing Graphs	Lesson 14.1 - Khan Academy Lesson 14.2 - Khan Academy Lesson 14.3 - Khan Academy Lesson 14.4 - Khan Academy
	7	Unit 6 - Proportional and Nonproportional Relationships and Functions - Assessment Unit 7 - Solving Linear Equations and Systems of Equations	Lesson 15.1 - Khan Academy

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		Module 15 - Solving Linear Equations – Lesson 15.1 Equations with the Variable on Both Sides	
	8	Unit 7 - Solving Linear Equations and Systems of Equations - Lesson 15.1 - Equations with the Variable on Both Sides - Lesson 15.2 - Equations with Rational Numbers - Lesson 15.3 - Equations with the Distributive Property - Lesson 15.4 - Equations with Many Solutions or No Solution	Lesson 15.2 - Khan Academy Lesson 15.3 - Khan Academy Lesson 15.4 - Khan Academy
	9	Unit 7 - Solving Linear Equations and Systems of Equations - Assessment - Module 16 - Solving Systems of Linear Equations – Lesson 16.1 Solving Systems of Linear Equations by Graphing - Lesson 16.2 - Solving Systems by Substitution - Lesson 16.3 - Solving Systems by Elimination - Lesson 16.4 - Solving Systems by Elimination with Multiplication - Lesson 16.5 - Solving Special Systems	Lesson 16.1 - Khan Academy Lesson 16.2 - Khan Academy Lesson 16.3 - Khan Academy Lesson 16.4 - Khan Academy Lesson 16.5 - Khan Academy
	10	Unit 7 - Solving Linear Equations and Systems of Equations - Assessment	
	11	Quarter Assessment	

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Quarter 4 Mar 29 – May 26	1	Unit 8 - Transformational Geometry - Module 17 - Transformations and Congruence – Lesson 17.1 Properties of Translations - Lesson 17.2 - Properties of Reflections - Lesson 17.3 - Properties of Rotations - Lesson 17.4 - Algebraic Representations of Transformations - Lesson 17.5 - Congruent Figures	Lesson 17.1 - Khan Academy Lesson 17.2 - Khan Academy Lesson 17.3 - Khan Academy Lesson 17.4 - Khan Academy Lesson 17.5 - Khan Academy
	2	Unit 8 - Transformational Geometry - Module 18 - Transformations and Similarity – Lesson 18.1 Properties of Dilations - Lesson 18.2 - Algebraic Representations of Dilations - Lesson 18.3 - Similar Figures	Lesson 18.1 - Khan Academy Lesson 18.2 - Khan Academy Lesson 18.3 - Khan Academy
	3	Unit 8 - Transformational Geometry - Assessment Unit 9 - Measurement Geometry - Module 19 - Angle Relationships in Parallel Lines and Triangles – Lesson 19.1 Parallel Lines Cut by a Transversal - Lesson 19.2 - Angle Theorems for Triangles - Lesson 19.3 - Angle-Angle Similarity	Lesson 19.1 - Khan Academy Lesson 19.2 - Khan Academy Lesson 19.3 - Khan Academy
	4	Unit 1-9 - Standards Review	Grade 7 Standards Review – Florida Students
	5	Unit 9 - Measurement Geometry - Module 20 - The Pythagorean Theorem – Lesson 20.1 The Pythagorean Theorem - Lesson 20.2 - Converse of the Pythagorean Theorem - Lesson 20.3 - Distance Between Two Points	Lesson 20.1 - Khan Academy Lesson 20.2 - Khan Academy
	6	Unit 9 - Measurement Geometry - Assessment - Module 21 - Volume – Lesson 21.1 Volume of Cylinders - Lesson 21.2 - Volume of Cones - Lesson 21.3 - Volume of Spheres	Lesson 21.1 - Khan Academy Lesson 21.2 - Khan Academy Lesson 21.3 - Khan Academy
	7	Unit 9 - Measurement Geometry - Assessment Unit 10 - Statistics: Bivariate Data - Module 22 – Scatter Plots - Lesson 22.1 - Scatter Plots and Associations - Lesson 22.2 - Trend Lines and Predictions	Lesson 22.1 - Khan Academy Lesson 22.2 - Khan Academy

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	8	• Unit 10 - Statistics: Bivariate Data • Module 23 – Two-Way Tables – Lesson 23.1 – Two-Way Frequency Tables • Lesson 23.2 – Two-Way Relative Frequency Tables • Assessment	Lesson 23-1 - Khan Academy Lesson 23-2 - Khan Academy Intro to Algebra - Khan Academy
	9	• Semester Assessment	

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