

# Grade 7 Mathematics Advanced

2015 – 2016

## **Please Note:**

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## **Publisher Resource:**

Go Math - [My.hrw.com](http://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
<a href="#">Quarter 1</a> <a href="#">Aug 10 – Oct 16</a>	1	<ul style="list-style-type: none"> <li>• <b>Unit 0</b></li> <li>• Prerequisite Skills - May include long division, operations with integers, solving linear equations.</li> <li>• Assessment</li> <li>• <b>Unit 1 - Expressions and Equations</b></li> <li>• Module 1 – Expressions and Equations - Lesson 1.1 - Algebraic Expressions</li> </ul>	Unit 0 - <a href="#">Khan Academy</a>  Lesson 1.1 – <a href="#">Khan Academy</a>
	2	<ul style="list-style-type: none"> <li>• <b>Unit 1 - Expressions and Equations</b></li> <li>• Lesson 1.1 - Algebraic Expressions</li> <li>• Lesson 1.2 - One-Step Equations with Rational Coefficients</li> </ul>	Lesson 1.2 – <a href="#">Khan Academy</a>
	3	<ul style="list-style-type: none"> <li>• <b>Unit 1 - Expressions and Equations</b></li> <li>• Module 1 - Lesson 1.3 Writing Two-Step Equations</li> <li>• Lesson 1.4 - Solving Two-Step Equations</li> <li>• Assessment</li> <li>• Module 2 – Inequalities – Lesson 2.1 Writing and Solving One-Step Inequalities</li> </ul>	Lesson 1.3 – <a href="#">Khan Academy</a>  Lesson 1.3 – <a href="#">Khan Academy</a>  Lesson 2.1 – <a href="#">Khan Academy</a>
	4	<ul style="list-style-type: none"> <li>• <b>Unit 1 - Expressions and Equations</b></li> <li>• Lesson 2.2 - Writing Two-Step Inequalities</li> <li>• Lesson 2.3 - Solving Two-Step Inequalities</li> <li>• Assessment</li> </ul>	Lesson 2.2 – <a href="#">Khan Academy</a> Lesson 2.3 – <a href="#">Khan Academy</a>
	5	<ul style="list-style-type: none"> <li>• <b>Unit 2 - Geometry</b></li> <li>• Module 3- Modeling Geometric Figures – Lesson 3.1 Similar Shapes and Scale Drawings</li> <li>• Lesson 3.3 - Cross Sections</li> <li>• Lesson 3.4 - Angle Relationships</li> </ul>	Lesson 3.3 – <a href="#">Khan Academy</a> Lesson 3.4 – <a href="#">Khan Academy</a>
	6	<ul style="list-style-type: none"> <li>• <b>Unit 2 - Geometry</b></li> <li>• Lesson 3.2 - Geometric Drawings</li> <li>• Assessment</li> <li>• Module 4 – Circumference, Area, and Volume – Lesson 4.1 Circumference</li> </ul>	Lesson 3.2 – <a href="#">Khan Academy</a>  Lesson 4.1 – <a href="#">Khan Academy</a>
	7	<ul style="list-style-type: none"> <li>• <b>Unit 2 - Geometry</b></li> <li>• Lesson 4.2 - Area of Circles</li> <li>• Lesson 4.3 - Area of Composite Figures</li> <li>• Lesson 4.4 - Solving Surface Area Problems</li> </ul>	Lesson 4.2 – <a href="#">Khan Academy</a> Lesson 4.3 – <a href="#">Khan Academy</a> Lesson 4.4 – <a href="#">Khan Academy</a> Lesson 4.5 – <a href="#">Khan Academy</a>

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	<ul style="list-style-type: none"> <li>Lesson 4.5 - Solving Volume Problems</li> </ul>	
8	<ul style="list-style-type: none"> <li><b>Unit 2 - Geometry</b></li> <li>Lesson 4.5 - Solving Volume Problems</li> <li>Assessment</li> <li><b>Unit 3 - Statistics and Sampling</b></li> <li>Module 5 – Random Samples and Populations – Lesson 5.1 Populations and Samples</li> </ul>	Lesson 5.1 – <a href="#">Khan Academy</a>
9	<ul style="list-style-type: none"> <li><b>Unit 3 - Statistics and Sampling</b></li> <li>Lesson 5.2 - Making Inferences from a Random Sample</li> <li>Module 6 – Analyzing and Comparing Data – Lesson 6.1 Comparing Data Displayed in Dot Plots</li> <li>Lesson 6.2 - Comparing Data Displayed in Box Plots</li> </ul>	Lesson 5.2 – <a href="#">Khan Academy</a> Lesson 6.1 – <a href="#">Khan Academy</a> Lesson 6.2 – <a href="#">Khan Academy</a>
10	<ul style="list-style-type: none"> <li><b>Unit 3 - Statistics and Sampling</b></li> <li>Lesson 6.2 - Comparing Data Displayed in Box Plots</li> <li>Quarter Assessment</li> </ul>	

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	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 19 – Dec 18	1	<ul style="list-style-type: none"> <li>• <b>Unit 3 - Statistics and Sampling</b></li> <li>• Lesson 6.3 - Using Statistical Measures to Compare Populations</li> <li>• Assessment</li> </ul>	Lesson 6.3 – <a href="#">Khan Academy</a>
	2	<ul style="list-style-type: none"> <li>• <b>Unit 4 - Probability</b></li> <li>• Module 7 – Experimental Probability – Lesson 7.1 Probability</li> <li>• Lesson 7.2 - Experimental Probability of Simple Events</li> <li>• Lesson 7.3 - Experimental Probability of Compound Events</li> <li>• Module 8 – Theoretical Probability and Simulations – Lesson 8.1 Theoretical Probability of Simple Events</li> <li>• Lesson 8.2 Theoretical Probability of Compound Events</li> </ul>	Lesson 7.1 – <a href="#">Khan Academy</a> Lesson 7.2 – <a href="#">Khan Academy</a> Lesson 7.3 – <a href="#">Khan Academy</a> Lesson 8.1 – <a href="#">Khan Academy</a>  Lesson 8.2 – <a href="#">Khan Academy</a>
	3	<ul style="list-style-type: none"> <li>• <b>Unit 2 - Probability</b></li> <li>• Lesson 7.4 - Making Predictions with Experimental Probability</li> <li>• Lesson 8.3 - Making Predictions with Theoretical Probability</li> <li>• Lesson 8.4 - Using Technology to Conduct a Simulation</li> <li>• Assessment</li> </ul>	Lesson 7.4 – <a href="#">Khan Academy</a> Lesson 8.3 – <a href="#">Khan Academy</a> Lesson 8.4 – <a href="#">Khan Academy</a>
	4	<ul style="list-style-type: none"> <li>• <b>Unit 5 - Real Numbers, Exponents, and Scientific Notation</b></li> <li>• Module 9 – Real Numbers – Lesson 9.1 Rational and Irrational Numbers</li> <li>• Lesson 9.2 - Sets of Real Numbers</li> </ul>	Lesson 9.1 - <a href="#">Khan Academy</a> Lesson 9.2 - <a href="#">Khan Academy</a>
	5	<ul style="list-style-type: none"> <li>• <b>Unit 5 - Real Numbers, Exponents, and Scientific Notation</b></li> <li>• Lesson 9.3 - Ordering Real Numbers</li> <li>• Assessment</li> <li>• Module 10 – Exponents and Scientific Notation – Lesson 10.1 Integer Exponents</li> </ul>	Lesson 9.3 - <a href="#">Khan Academy</a>  Lesson 10.1 - <a href="#">Khan Academy</a>
	6	<ul style="list-style-type: none"> <li>• <b>Unit 5 - Real Numbers, Exponents, and Scientific Notation</b></li> <li>• Lesson 10.1 - Integer Exponents</li> </ul>	
	7	<ul style="list-style-type: none"> <li>• <b>Unit 5 - Real Numbers, Exponents, and Scientific Notation</b></li> <li>• Lesson 10.2 - Scientific Notation with Positive Powers of 10</li> <li>• Lesson 10.3 - Scientific Notation with Negative Powers of 10</li> <li>• Lesson 10.4 - Operations with Scientific Notation</li> </ul>	Lesson 10.2 - <a href="#">Khan Academy</a> Lesson 10.3 - <a href="#">Khan Academy</a> Lesson 10.4 - <a href="#">Khan Academy</a>
	8	<ul style="list-style-type: none"> <li>• <b>Unit 5 - Real Numbers, Exponents, and Scientific Notation</b></li> <li>• Lesson 10.4 - Operations with Scientific Notation</li> </ul>	

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		<ul style="list-style-type: none"><li>• Assessments</li></ul>
	9	<ul style="list-style-type: none"><li>• <b>Unit 5 - Real Numbers, Exponents, and Scientific Notation</b></li><li>• Lesson 10.4 - Operations with Scientific Notation</li><li>• Semester Assessment</li></ul>

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	Week	Major Concepts / Topics	Possible Resources
Quarter 3 Jan 5 – Mar 18	1	<ul style="list-style-type: none"> <li>● <b>Unit 6 - Proportional and Nonproportional Relationships and Functions</b></li> <li>● Module 11 – Proportional Relationships – Lesson 11.1 Representing Proportional Relationships</li> <li>● Lesson 11.2 - Rate of Change and Slope</li> </ul>	Lesson 11.1 - <a href="#">Khan Academy</a> Lesson 11.2 - <a href="#">Khan Academy</a>
	2	<ul style="list-style-type: none"> <li>● <b>Unit 4 - Proportional and Nonproportional Relationships and Functions</b></li> <li>● Lesson 11.3 - Interpreting the Unit Rate</li> <li>● Assessment</li> </ul>	Lesson 11.3 - <a href="#">Khan Academy</a>
	3	<ul style="list-style-type: none"> <li>● <b>Unit 6 - Proportional and Nonproportional Relationships and Functions</b></li> <li>● Module 12 – Nonproportional Relationships - Lesson 12.1 - Representing Linear Nonproportional Relationships</li> <li>● Lesson 12.2 - Determining Slope and y-intercept</li> <li>● Lesson 12.3 - Graphing Linear Nonproportional Relationships Using Slope and y-intercept</li> <li>● Lesson 12.4 - Proportional and Nonproportional Situations</li> </ul>	Lesson 12.1 - <a href="#">Khan Academy</a> Lesson 12.2 - <a href="#">Khan Academy</a> Lesson 12.3 - <a href="#">Khan Academy</a> Lesson 12.4 - <a href="#">Khan Academy</a>
	4	<ul style="list-style-type: none"> <li>● <b>Unit 6 - Proportional and Nonproportional Relationships and Functions</b></li> <li>● Assessment</li> <li>● Module 13 - Writing Linear Equations – Lesson 13.1 - Writing Linear Equations from Situations and Graphs</li> <li>● Lesson 13.2 - Writing Linear Equations from a Table</li> </ul>	Lesson 13.1 - <a href="#">Khan Academy</a> Lesson 13.2 - <a href="#">Khan Academy</a>
	5	<ul style="list-style-type: none"> <li>● <b>Unit 6 - Proportional and Nonproportional Relationships and Functions</b></li> <li>● Lesson 13.3 - Linear Relationships and Bivariate Data</li> <li>● Assessment</li> </ul>	Lesson 13.3 – <a href="#">Khan Academy</a>
	6	<ul style="list-style-type: none"> <li>● <b>Unit 6 - Proportional and Nonproportional Relationships and Functions</b></li> <li>● Module 14 - Functions – Lesson 14.1 - Identifying and Representing Functions</li> <li>● Lesson 14.2 - Describing Functions</li> <li>● Lesson 14.3 - Comparing Functions</li> <li>● Lesson 14.4 - Analyzing Graphs</li> </ul>	Lesson 14.1 - <a href="#">Khan Academy</a> Lesson 14.2 - <a href="#">Khan Academy</a> Lesson 14.3 - <a href="#">Khan Academy</a> Lesson 14.4 - <a href="#">Khan Academy</a>
	7	<ul style="list-style-type: none"> <li>● <b>Unit 6 - Proportional and Nonproportional Relationships and Functions</b></li> <li>● Assessment</li> <li>● <b>Unit 7 - Solving Linear Equations and Systems of Equations</b></li> </ul>	Lesson 15.1 - <a href="#">Khan Academy</a>

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	<ul style="list-style-type: none"> <li>Module 15 - Solving Linear Equations – Lesson 15.1 Equations with the Variable on Both Sides</li> </ul>	
8	<ul style="list-style-type: none"> <li><b>Unit 7 - Solving Linear Equations and Systems of Equations</b></li> <li>Lesson 15.1 - Equations with the Variable on Both Sides</li> <li>Lesson 15.2 - Equations with Rational Numbers</li> <li>Lesson 15.3 - Equations with the Distributive Property</li> <li>Lesson 15.4 - Equations with Many Solutions or No Solution</li> </ul>	Lesson 15.2 - <a href="#">Khan Academy</a> Lesson 15.3 - <a href="#">Khan Academy</a> Lesson 15.4 - <a href="#">Khan Academy</a>
9	<ul style="list-style-type: none"> <li><b>Unit 7 - Solving Linear Equations and Systems of Equations</b></li> <li>Assessment</li> <li>Module 16 - Solving Systems of Linear Equations – Lesson 16.1 Solving Systems of Linear Equations by Graphing</li> <li>Lesson 16.2 - Solving Systems by Substitution</li> <li>Lesson 16.3 - Solving Systems by Elimination</li> <li>Lesson 16.4 - Solving Systems by Elimination with Multiplication</li> <li>Lesson 16.5 - Solving Special Systems</li> </ul>	Lesson 16.1 - <a href="#">Khan Academy</a>  Lesson 16.2 - <a href="#">Khan Academy</a> Lesson 16.3 - <a href="#">Khan Academy</a> Lesson 16.4 - <a href="#">Khan Academy</a> Lesson 16.5 - <a href="#">Khan Academy</a>
10	<ul style="list-style-type: none"> <li><b>Unit 7 - Solving Linear Equations and Systems of Equations</b></li> <li>Assessment</li> </ul>	
11	<ul style="list-style-type: none"> <li>Quarter Assessment</li> </ul>	

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Quarter 4 Mar 29 – May 26	1	<ul style="list-style-type: none"> <li>• <b>Unit 8 - Transformational Geometry</b></li> <li>• Module 17 - Transformations and Congruence – Lesson 17.1 Properties of Translations</li> <li>• Lesson 17.2 - Properties of Reflections</li> <li>• Lesson 17.3 - Properties of Rotations</li> <li>• Lesson 17.4 - Algebraic Representations of Transformations</li> <li>• Lesson 17.5 - Congruent Figures</li> </ul>	Lesson 17.1 - <a href="#">Khan Academy</a> Lesson 17.2 - <a href="#">Khan Academy</a> Lesson 17.3 - <a href="#">Khan Academy</a> Lesson 17.4 - <a href="#">Khan Academy</a> Lesson 17.5 - <a href="#">Khan Academy</a>
	2	<ul style="list-style-type: none"> <li>• <b>Unit 8 - Transformational Geometry</b></li> <li>• Module 18 - Transformations and Similarity – Lesson 18.1 Properties of Dilations</li> <li>• Lesson 18.2 - Algebraic Representations of Dilations</li> <li>• Lesson 18.3 - Similar Figures</li> </ul>	Lesson 18.1 - <a href="#">Khan Academy</a> Lesson 18.2 - <a href="#">Khan Academy</a> Lesson 18.3 - <a href="#">Khan Academy</a>
	3	<ul style="list-style-type: none"> <li>• <b>Unit 8 - Transformational Geometry</b></li> <li>• Assessment</li> <li>• <b>Unit 9 - Measurement Geometry</b></li> <li>• Module 19 - Angle Relationships in Parallel Lines and Triangles – Lesson 19.1 Parallel Lines Cut by a Transversal</li> <li>• Lesson 19.2 - Angle Theorems for Triangles</li> <li>• Lesson 19.3 - Angle-Angle Similarity</li> </ul>	Lesson 19.1 - <a href="#">Khan Academy</a>  Lesson 19.2 - <a href="#">Khan Academy</a> Lesson 19.3 - <a href="#">Khan Academy</a>
	4	<ul style="list-style-type: none"> <li>• <b>Unit 1-9</b></li> <li>• Standards Review</li> </ul>	Grade 7 Standards Review – <a href="#">Florida Students</a>
	5	<ul style="list-style-type: none"> <li>• <b>Unit 9 - Measurement Geometry</b></li> <li>• Module 20 - The Pythagorean Theorem – Lesson 20.1 The Pythagorean Theorem</li> <li>• Lesson 20.2 - Converse of the Pythagorean Theorem</li> <li>• Lesson 20.3 - Distance Between Two Points</li> </ul>	Lesson 20.1 - <a href="#">Khan Academy</a> Lesson 20.2 - <a href="#">Khan Academy</a>
	6	<ul style="list-style-type: none"> <li>• <b>Unit 9 - Measurement Geometry</b></li> <li>• Assessment</li> <li>• Module 21 - Volume – Lesson 21.1 Volume of Cylinders</li> <li>• Lesson 21.2 - Volume of Cones</li> <li>• Lesson 21.3 - Volume of Spheres</li> </ul>	Lesson 21.1 - <a href="#">Khan Academy</a> Lesson 21.2 - <a href="#">Khan Academy</a> Lesson 21.3 - <a href="#">Khan Academy</a>
	7	<ul style="list-style-type: none"> <li>• <b>Unit 9 - Measurement Geometry</b></li> <li>• Assessment</li> <li>• <b>Unit 10 - Statistics: Bivariate Data</b></li> <li>• Module 22 – Scatter Plots - Lesson 22.1 - Scatter Plots and Associations</li> <li>• Lesson 22.2 - Trend Lines and Predictions</li> </ul>	Lesson 22.1 - <a href="#">Khan Academy</a> Lesson 22.2 - <a href="#">Khan Academy</a>

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	8	<ul style="list-style-type: none"><li>• <b>Unit 10 - Statistics: Bivariate Data</b></li><li>• Module 23 – Two-Way Tables – Lesson 23.1 – Two-Way Frequency Tables</li><li>• Lesson 23.2 – Two-Way Relative Frequency Tables</li><li>• Assessment</li></ul>	Lesson 23-1 - <a href="#">Khan Academy</a> Lesson 23-2 - <a href="#">Khan Academy</a> Intro to Algebra - <a href="#">Khan Academy</a>
	9	<ul style="list-style-type: none"><li>• Semester Assessment</li></ul>	

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