

# 6th Grade Accelerated Math

## 6<sup>th</sup> Accelerated Mathematics - Year at a Glance

Course # 1205020

<u>A Note to Parents</u>: The Florida state standards require math teachers plan lessons that build knowledge of various mathematical concepts, develop the ability to apply these concepts, and engage students in critical thinking and discourse. All standards in the state course description are designed to be learned by the end of the course.

Please note the units of study listed below indicate the course sequence. Instructional pacing may vary. Specific questions regarding when content will be addressed in a specific course are best answered by the individual teacher.

### **Course Description**

In grade 6 accelerated, instructional time will emphasize five areas: (1) performing all four operations with rational numbers with procedural fluency; (2) exploring and applying concepts of ratios, rates, percentages and proportions to solve problems; (3) creating, interpreting and using expressions, equations and inequalities; (4) extending geometric reasoning to plotting points on the coordinate plane, area and volume of geometric figures and (5) extending understanding of statistical thinking to represent and compare categorical and numerical data.

Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.

IB MYP Notes: The International Baccalaureate® aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. The MYP curriculum framework comprises eight subject groups, providing a broad and balanced education for early adolescents. The MYP requires at least 50 hours of teaching time for each subject group, in each year of the program. The MYP is inclusive by design; students of all interests and academic abilities can benefit from their participation.

#### **CPALMS Link**

Please follow the link below to learn more about the course expectations, the course standards, and to access student resources. The student resources include Florida Department of Education recommended resources that students can use to learn the concepts and skills in this course. After clicking the link, please make sure you are in the "2022 and Beyond" tab on the website. This will ensure you are looking at our new B.E.S.T. Standards.

6<sup>th</sup> Accelerated: https://www.cpalms.org/PreviewCourse/Preview/10283

	Module of Study	Module Sequence
Quarter 1	Module 1:	Multiply multi-digit decimals
Aug 10 – Oct 12	Compute with Decimals and	Divide multi-digit decimals
45 Days	Fractions	Factors and multiples
	1146116115	Define Factors and Multiples
		Multiply fractions
		Divide whole numbers by fractions
		Divide fractions by fractions
		Divide with whole and mixed numbers
		Whole numbers
		Apply decimal and fraction operations
	Module 2:	<ul> <li>Defining integers and rational numbers</li> </ul>
	Integers and Rational Numbers	Comparing and Ordering Integers
		Compare and order rational numbers
		Absolute value
		Solve problems with absolute value
	Module 3:	Add integers
	Compute with Integers	Subtract integers
		Multiple integers
		Divide integers
		Apply integer operations
	Module 5:	Rational numbers
	Rational Numbers	Add rational numbers
	(update from 22-23)	Multiply rational numbers
	(apaate from 22 23)	Divide rational numbers
		Apply rational number operations
Quarter 2	Module 4:	Powers and exponents
Oct 13 – Dec 21	Numerical and Algebraic	Numerical expressions
46 Days	Expressions	Write algebraic expressions
	(update from 22-23)	Evaluate algebraic expressions
	(apaate from 22 23)	Use the distributive property
		Equivalent algebraic expressions
	Module 6:	Simplify Algebraic Expressions
	Algebraic Expressions	Add linear expressions
		Subtract linear expressions
		<ul> <li>Combine operations with linear expressions</li> </ul>
		Equivalent algebraic expressions
	Module 7:	<ul> <li>Use substitution to solve equations</li> </ul>
	One-Step Equations and	<ul> <li>Use addition equations to solve problems</li> </ul>
1	Inequalities	Use subtraction equations to solve problems
1		Use multiplication equations to solve problems
		<ul> <li>Use division equations to solve problems</li> </ul>
1		Equations with rational numbers
		• Inequalities
	İ	Colve inequalities
		Solve inequalities
	Module 8:	Addition and subtraction inequalities

Quarter 3 Jan 8 – Mar 7 42 Days	Module 9: Ratios, Rates, and Proportions	<ul> <li>problems</li> <li>Multiplication and division inequalities with positive coefficients</li> <li>Multiplication and division inequalities with negative coefficients</li> <li>Use multiplication and division inequalities to solve problems</li> <li>Ratios</li> <li>Tables of equivalent rations</li> <li>Solve ratio problems</li> <li>Convert within the customary system</li> <li>Convert within the metric system</li> <li>Rates and unit rates</li> </ul>
	Module 10: Percents  Module 11:	<ul> <li>Proportions</li> <li>Percents</li> <li>Percents greater that 100% and less than 1%</li> <li>Relate fractions, decimals, and percents</li> <li>Find the percent of a number</li> <li>Estimate the percent of a number</li> <li>Find a whole</li> <li>Find a percent</li> <li>Connect ratios, proportions, and percents</li> </ul>
	Solve Problems Involving Proportions and Percents	<ul> <li>Percent of change</li> <li>Tax</li> <li>Tips and markdowns</li> <li>Discounts</li> <li>Interest</li> <li>Commission and fees</li> <li>Percent error</li> </ul>
	Module 12: Coordinate Geometry	<ul> <li>The coordinate plane</li> <li>Reflections of points</li> <li>Distance on the coordinate plane</li> <li>Perimeter and area on the coordinate plane</li> </ul>
<b>Quarter 4</b> Mar 18 – May 24  44 Days	Module 13: Area, Volume, and Surface Area	<ul> <li>Area of triangles</li> <li>Area of quadrilaterals</li> <li>Area of composite figures</li> <li>Volume of right rectangular prisms</li> <li>Surface area of right rectangular prisms</li> <li>Surface area of pyramids</li> </ul>
	Module 14: Area	<ul> <li>Area pf parallelograms</li> <li>Area of trapezoids</li> <li>Area of polygons</li> <li>Area of composite figures</li> </ul>
	Module 15: Statistical Measures and Displays	<ul> <li>Statistical questions</li> <li>Biased and unbiased</li> <li>Histograms</li> <li>Measures of center</li> <li>Interquartile range and box plots</li> <li>Outliers</li> </ul>

	<ul><li>Interpret data distributions</li><li>Changes in data values</li></ul>
Module 16: Statistical Measures	<ul><li>Measures of center</li><li>Compare two populations</li><li>Make predications</li></ul>
Module 17: Probability	<ul> <li>Simple events</li> <li>Sample space</li> <li>Theoretical probability</li> <li>Experimental probability</li> </ul>

#### **Course Resources**

#### **Core Textbook:**

Florida Reveal Math - Students have online access through My.SarasotaCountySchools.net

#### F.A.S.T. Assessment Information:

https://flfast.org/

https://flfast.org/-/media/project/client-portals/florida-fast/pdf/fast-facts.pdf

#### **Supplemental Resources:**

i-Ready - Students log in through My.SarasotaCountySchools.net

ALEKS – Students log in through My.SarasotaCountySchools.net

Nearpod - Students log in through My.SarasotaCountySchools.net

Khan Academy

For additional supplemental resources, please see your child's course syllabus.