

# SUMMER MATH SKILLS PLAN

Florida B.E.S.T. Standards for Math are broken down into three larger categories, with multiple standards for each category. Use this checklist to work on skills associated with each standard on IXL.com. Students can log in using their N# and SLA pin.

Please note the grade level of each skill in IXL. For each skill, work until to a SmartScore of at least 80 and record the final score on the checklist below. Each completed category will earn a casual day at the beginning of next school year!

## NUMBER SENSE AND OPERATIONS AND ALGEBRAIC REASONING

STANDARD	7TH GRADE IXL SKILLS	SCORE
<b>MA.7.NSO.1.1</b> Know and apply the Laws of Exponents to evaluate numerical expressions and generate equivalent numerical expressions, limited to whole-number exponents and rational number bases.	<b>J1:</b> Understanding exponents <b>J5:</b> Exponents with decimal and fractional bases	
<b>MA.7.NSO.1.2</b> Rewrite rational numbers in different but equivalent forms including fractions, mixed numbers, repeating decimals and percentages to solve mathematical and real-world problems.	<b>H3:</b> Convert between decimals and fractions or mixed numbers <b>O2:</b> Convert between percents, fractions, and decimals	
<b>MA.7.NSO.2.1</b> Solve mathematical problems using multi-step order of operations with rational numbers including grouping symbols, whole-number exponents and absolute value.	<b>B.25:</b> Evaluate numerical expressions involving integers <b>J7:</b> Evaluate numerical expressions involving exponents	
<b>MA.7.NSO.2.2</b> Add, subtract, multiply and divide rational numbers with procedural fluency.	<b>B.24:</b> Add, subtract, multiply, and divide integers <b>I3:</b> Add and subtract rational numbers <b>I9:</b> Multiply and divide rational numbers	
<b>MA.7.NSO.2.3</b> Solve real-world problems involving any of the four operations with rational numbers.	<b>D.9:</b> Add, subtract, multiply, and divide decimals; word problems <b>P1:</b> Add, subtract, multiply, and divide money amounts; word problems	
<b>MA.7.AR.1.1</b> Apply properties of operations to add and subtract linear expressions with rational coefficients.	<b>S.3:</b> Simplify expressions by combining like terms <b>S.7:</b> Add and subtract linear expressions	
<b>MA.7.AR.1.2</b> Determine whether two linear expressions are equivalent.	<b>S.12:</b> Identify equivalent linear expressions	
<b>MA.7.AR.2.1</b> Write and solve one-step inequalities in one variable within a mathematical context and represent solutions algebraically or graphically.	<b>U4:</b> Solve one-step inequalities <b>U5:</b> Graph solutions to one-step inequalities	
<b>MA.7.AR.2.2</b> Write and solve two-step equations in one variable within a mathematical or real-world context, where all terms are rational numbers.	<b>T.9:</b> Solve two-step equations	

# NUMBER SENSE AND OPERATIONS AND ALGEBRAIC REASONING

## STANDARD

## 6TH GRADE IXL SKILLS

## SCORE

**MA.6.NS.0.3.1** Given a mathematical or real-world context, find the greatest common factor and least common multiple of two whole numbers.

**F.3:** Find all the factor pairs of a number

**F.6:** Greatest common factor

**F.8:** Least common multiple

**MA.6.NS.0.3.4** Express composite whole numbers as a product of prime factors with natural number exponents.

**F.4:** Prime factorization

**MA.6.NS.0.3.5** Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages.

**G.7:** Convert between decimals and fractions

**U.4:** Convert between percents, fractions, and decimals

# PROPORTIONAL REASONING AND RELATIONSHIPS/DATA ANALYSIS AND PROBABILITY

STANDARD	7TH GRADE IXL SKILLS	SCORE
<b>MA.7.AR.3.1</b> Apply previous understanding of percentages and ratios to solve multi-step real-world percent problems.	<b>O.9:</b> Solve percent equations: word problems	
	<b>P.6:</b> Percent of a number: tax, discount, and more	
	<b>P.8:</b> Find the percent: tax, discount, and more	
	<b>P.12:</b> Simple interest	
	<b>O.10:</b> Percent of change	
<b>MA.7.AR.3.2</b> Apply previous understanding of ratios to solve real-world problems involving proportions.	<b>L.11:</b> Solve proportions	
	<b>L.12:</b> Solve proportions: word problems	
<b>MA.7.DP.1.1</b> Determine an appropriate measure of center or measure of variation to summarize numerical data, represented numerically or graphically, taking into consideration the context and any outliers.	<b>GG.13:</b> Box plots	
	<b>HH.1:</b> Calculate mean, median, mode, and range	
	<b>HH.6:</b> Calculate quartiles and interquartile range	
<b>MA.7.DP.1.2</b> Given two numerical or graphical representations of data, use the measure(s) of center and measure(s) of variability to make comparisons, interpret results and draw conclusions about the two populations.	<b>HH.9:</b> Compare populations using measures of center and spread	
<b>MA.7.DP.1.3</b> Given categorical data from a random sample, use proportional relationships to make predictions about a population.	<b>L.13:</b> Estimate population size using proportions	
<b>MA.7.DP.1.5</b> Given a real-world numerical or categorical data set, choose and create an appropriate graphical representation.	<b>GG.2:</b> Create line plots	
	<b>GG.5:</b> Create stem-and-leaf plots	
	<b>GG.9:</b> Create histograms	
<b>MA.7.DP.2.2</b> Given the probability of a chance event, interpret the likelihood of it occurring. Compare the probabilities of chance events.	<b>II.1:</b> Probability of simple events	
<b>MA.7.DP.2.3</b> Find the theoretical probability of an event related to a simple experiment.	<b>II.2:</b> Probability of simple events and opposite events	
<b>MA.7.DP.2.4</b> Use a simulation of a simple experiment to find experimental probabilities and compare them to theoretical probabilities.	<b>II.4:</b> Experimental probability	

# GEOMETRIC REASONING

## STANDARD

## 7TH GRADE IXL SKILLS

## SCORE

**MA.7.GR.1.1** Apply formulas to find the areas of trapezoids, parallelograms and rhombi.

**BB.2:** Area of rectangles and parallelograms

**B.3:** Area of triangles and trapezoids

**MA.7.GR.1.2** Solve mathematical or real-world problems involving the area of polygons or composite figures by decomposing them into triangles or quadrilaterals.

**BB.4:** Area and perimeter: word problems

**BB.11:** Area of compound figures made of rectangles

## STANDARD

## 6TH GRADE IXL SKILLS

## SCORE

**MA.6.GR.1.1** Extend previous understanding of the coordinate plane to plot rational number ordered pairs in all four quadrants and on both axes. Identify the x- or y-axis as the line of reflection when two ordered pairs have an opposite x- or y-coordinate.

**R.2:** Objects on a coordinate plane

**R.3:** Graph points on a coordinate plane

**MA.6.GR.1.2** Find distances between ordered pairs, limited to the same x-coordinate or the same y-coordinate, represented on the coordinate plane.

**R.7:** Distance between two points

**MA.6.GR.1.3** Solve mathematical and real-world problems by plotting points on a coordinate plane, including finding the perimeter or area of a rectangle.

**R.9:** Area and perimeter of squares and rectangles on the coordinate plane

**MA.6.GR.2.3** Solve mathematical and real-world problems involving the volume of right rectangular prisms with positive rational number edge lengths using a visual model and a formula.

**HH.1:** Volume of cubes and rectangular prisms

**MA.6.GR.2.4** Given a mathematical or real-world context, find the surface area of right rectangular prisms and right rectangular pyramids using the figure's net.

**HH.4:** Surface area of cubes and rectangular prisms