

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. Each skill below is a direct link to 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

STANDARD	IXL SKILLS	SCORE
MA.6.NS.O.1.1 Extend previous understanding of numbers to define rational numbers. Plot, order and compare rational numbers.	U.9: Compare percents to each other and to fractions (Search code GBY)	
	G.10: Put a mix of decimals, fractions, and mixed numbers in order (Search code AWV)	
	O.8: Put integers in order (Search code CMQ)	
	Q.1: Rational numbers on number lines (Search code DJE)	
	Q.5: Put rational numbers in order (Search code 5AX)	
MA.6.NS.O.1.2 Given a mathematical or real-world context, represent quantities that have opposite direction using rational numbers. Compare them on a number line and explain the meaning of zero within its context.	O.1: Understanding integers (Search code 8EP)	
	W.10: Compare temperatures above and below zero (Search code UVD)	
MA.6.NS.O.1.3 Given a mathematical or real-world context, interpret the absolute value of a number as the distance from zero on a number line. Find the absolute value of rational numbers.	O.5: Understanding absolute value (Search code TLR)	
	Q.8: Absolute value of rational numbers (Search code KGX)	
MA.6.NS.O.1.4 Solve mathematical and real-world problems involving absolute value, including the comparison of absolute value.	O.9: Integer inequalities with absolute values (Search code 4A8)	
MA.6.NS.O.2.1 Multiply and divide positive multi-digit numbers with decimals to the thousandths, including using a standard algorithm with procedural fluency.	I.3: Multiply decimals (Search code 2WT)	
MA.6.NS.O.2.2 Extend previous understanding of multiplication and division to compute products and quotients of positive fractions by positive fractions, including mixed numbers, with procedural fluency.	L.14: Multiply mixed numbers (Search code Z9M)	
	M.2: Reciprocals (Search code 5BT)	
	M.10: Divide fractions and mixed numbers (Search code N2B)	
MA.6.NS.O.2.3 Solve multi-step real-world problems involving any of the four operations with positive multi-digit decimals or positive fractions, including mixed numbers.	X.3: Unit prices with fractions and decimals (Search code 9NF)	

NUMBER SENSE AND OPERATIONS

STANDARD	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 (Search code VTM)	
	F.6: Greatest common factor (Search code AMB)	
	F.8: Least common multiple (Search code NGA)	
MA.6.NS.0.3.3 Evaluate positive rational numbers and integers with natural number exponents.	D.2: Evaluate powers (Search code XDA)	
	D.5: Powers with decimal bases (Search code D5D)	
MA.6.NS.0.3.4 Express composite whole numbers as a product of prime factors with natural number exponents.	F.4: Prime factorization (Search code 9CP)	
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 (Search code FL5)	
	U.7: Convert between percents, fractions, and decimals (Search code ZAV)	
MA.6.NS.0.4.1 Apply and extend previous understandings of operations with whole numbers to add and subtract integers with procedural fluency.	P.10: Add three or more integers (Search code F2N)	
	P.6: Subtract integers (Search code WQ6)	
MA.6.NS.0.4.2 Apply and extend previous understandings of operations with whole numbers to multiply and divide integers with procedural fluency.	P.12: Multiply integers: find the sign (Search code DKA)	
	P.16: Add, subtract, multiply, or divide two integers (Search code VMW)	

ALGEBRAIC REASONING

STANDARD	IXL SKILLS	SCORE
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.	Y.2: Write variable expressions: two operations (Search code CX9) Y.3: Write variable expressions: word problems (Search code 6LQ)	
MA.6.AR.1.2 Translate a real-world written description into an algebraic inequality in the form of $x > a$, $x < a$, $x \geq a$ or $x \leq a$. Represent the inequality on a number line.	BB.4: Write and graph inequalities: word problems (Search code AGB)	
MA.6.AR.1.3 Evaluate algebraic expressions using substitution and order of operations.	E.7: Evaluate numerical expressions involving whole numbers (Search code MLU) Y.5: Evaluate multi-variable expressions (Search code HC9)	
MA.6.AR.1.4 Apply the properties of operations to generate equivalent algebraic expressions with integer coefficients.	Z.5: Multiply using the distributive property (Search code 2HH) Z.I2: Identify equivalent expressions (Search code KFG)	
MA.6.AR.2.1 Given an equation or inequality and a specified set of integer values, determine which values make the equation or inequality true or false.	AA.2: Which x satisfies an equation? (Search code VG8) BB.I: Solutions to inequalities (Search code P9N)	
MA.6.AR.2.2 Write and solve one-step equations in one variable within a mathematical or real-world context using addition and subtraction, where all terms and solutions are integers.	AA.8: Solve one-step addition and subtraction equations with whole numbers (Search code JXM)	
MA.6.AR.2.3 Write and solve one-step equations in one variable within a mathematical or real-world context using multiplication and division, where all terms and solutions are integers.	AA.I0: One-step equations with whole numbers (Search code WLR)	
MA.6.AR.2.4 Determine the unknown decimal or fraction in an equation involving any of the four operations, relating three numbers, with the unknown in any position.	AA.I2: Solve one-step multiplication and division equations with decimals and fractions (Search code T53)	
MA.6.AR.3.1 Given a real-world context, write and interpret ratios to show the relative sizes of two quantities using appropriate notation: a/b , a to b , or $a:b$ where $b \neq 0$.	S.2: Write a ratio using a colon (Search code 83K)	
MA.6.AR.3.2 Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate.	S.II: Unit rates (Search code JSZ)	

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MA.6.AR.3.3 Extend previous understanding of fractions and numerical patterns to generate or complete a two-or three-column table to display equivalent part-to-part ratios and part-to-part-to-whole ratios.

S.8: [Write an equivalent ratio \(Search code NEA\)](#)

MA.6.AR.3.4 Apply ratio relationships to solve mathematical and real-world problems involving percentages using the relationship between two quantities.

V.5: [Percents of numbers: word problems \(Search code BBY\)](#)

V.7: [Find what percent one number is of another \(Search code PE7\)](#)

V.9: [Find the total given a part and a percent \(Search code D6L\)](#)

X.5: [Sale prices \(Search code 5GH\)](#)

MA.6.AR.3.5 Solve mathematical and real-world problems involving ratios, rates and unit rates, including comparisons, mixtures, ratios of lengths and conversions within the same measurement system.

S.18: [Ratios and rates: word problems \(Search code ZB9\)](#)

GEOMETRIC REASONING, DATA ANALYSIS, AND PROBABILITY

STANDARD

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 \(Search code GFN\)](#)

R.3: [Graph points on a coordinate plane \(Search code VHQ\)](#)

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 \(Search code A7P\)](#)

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 \(Search code UCD\)](#)

MA.6.GR.2.1 Derive a formula for the area of a right triangle using a rectangle. Apply a formula to find the area of a triangle.

GG.6: [Area of triangles \(Search code C8S\)](#)

MA.6.GR.2.2 Solve mathematical and real-world problems involving the area of quadrilaterals and composite figures by decomposing them into triangles or rectangles.

GG.10: [Area of quadrilaterals \(Search code 27F\)](#)

GG.11: [Area of compound figures \(Search code 76U\)](#)

GG.13: [Area between two rectangles \(Search code EY6\)](#)

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 \(Search code XHF\)](#)

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 \(Search code RMG\)](#)

MA.6.DP.1.1 Recognize and formulate a statistical question that would generate numerical data.

JJ.1: [Identify statistical questions \(Search code PT7\)](#)

MA.6.DP.1.2 Given a numerical data set within a real-world context, find and interpret mean, median, mode and range.

JJ.3: [Interpret charts and graphs to find mean, median, mode, and range \(Search code 2WK\)](#)

GEOMETRIC REASONING, DATA ANALYSIS, AND PROBABILITY

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MA.6.DP.1.3 Given a box plot within a real-world context, determine the minimum, the lower quartile, the median, the upper quartile and the maximum. Use this summary of the data to describe the spread and distribution of the data.

II.2: [Box plots \(Search code E9F\)](#)

MA.6.DP.1.4 Given a histogram or line plot within a real-world context, qualitatively describe and interpret the spread and distribution of the data, including any symmetry, skewness, gaps, clusters, outliers and the range.

II.2: [Interpret line plots \(Search code M5Y\)](#)

MA.6.DP.1.5 Create box plots and histograms to represent sets of numerical data within real-world contexts.

II.2: [Create histograms \(Search code 7NG\)](#)

MA.6.DP.1.6 Given a real-world scenario, determine and describe how changes in data values impact measures of center and variation.

JJ.5: [Changes in mean, median, mode, and range \(Search code 2G9\)](#)