



## SUMMER MATH REVIEW 2022

- ✚ **IXL Math** is a proven program which allows students to review and practice skills they learned throughout the past year. By working in this program, our students will not experience the famous *Summer Slide* that makes students lose ground over the summer months.
- ✚ Input received from our parents and other schools led **IXL Math** to make some changes in their program for this year. We also changed our expectation to a 90% mastery to allow for the occasional error. Of course, students can always go for 100% mastery!
- ✚ Students in Honors Math grades 4-8 should complete a mastery of 100%.
- ✚ To complete the required summer Math Review, log on to <https://www.ixl.com/signin/holycross>
- ✚ You will receive a log-in name and password for each child with your report cards. They did not change from last year. New students will receive them with their class assignments.
- ✚ Students do not need to enter the **@holycross** portion of their username when signing in from this special page.
- ✚ To begin, click on the **Practice tab** and choose the **grade level you just completed**.
- ✚ Click on a skill and practice math!
- ✚ **Students will be working in the grade they just completed for this Math review.**
- ✚ Students are to attain a 90% mastery for each skill listed below. When they complete enough problems correctly, the program will tell them that they have attained 90%. Of course, students may do additional problems and work in skills not assigned.
- ✚ Calculators may not be used since this is a review of basic skills.
- ✚ Weekly reports will be emailed to your child's upcoming teacher.
- ✚ Any questions, please contact Mrs. Lanier at [dlanier@holycrossweb.com](mailto:dlanier@holycrossweb.com)

### Rising 2<sup>nd</sup> Graders Math Topics from 1<sup>st</sup> Grade Math Program

Addition sentences using number lines – sums up to 20 (Addition 8)

Addition facts – sums up to 20 (Addition 9)

Addition word problems – sums up to 20 (Addition 12)

Addition sentences for word problems – sums up to 20 (Addition 13)

Make a number using addition – sums up to 20 (Addition 10)

Subtraction sentences using number lines – numbers up to 20 (Subtraction 9)

Subtraction facts – numbers up to 20 (Subtraction 10)

Subtraction word problems – numbers up to 20 (Subtraction 13)

Subtraction sentences for word problems – numbers up to 20 (Subtraction 14)

Addition and subtraction facts – numbers up to 20 (Mixed Operations 5)

Addition and subtraction word problems (Mixed Operations 6)

Addition and subtraction facts: which is true? (Mixed Operations 7)

Ten more or less (Mixed Operations 8)

Add and subtract to tens (Mixed Operations 9)

Comparing numbers up to 100 using words (Comparing 4)

Comparing numbers up to 100 using symbols (Comparing 5)

### **Rising 3rd Graders Math Topics from 2<sup>nd</sup> Grade Math program**

Skip Counting by 2s, 5s, & 10s (Counting and Number Patterns 5)  
Skip Counting Sequences (Counting and Number Patterns 7)  
Comparing numbers up to 100 (Comparing and Ordering 1)  
Even or odd (Counting and Number Patterns 16)  
Add two two-digit numbers-with regrouping (Addition two-digits 6)  
Subtract two two-digit numbers- with regrouping (Subtraction two-digits 6)  
Add multiples of 100 (Addition three-digit 1)  
Subtract multiples of 100 ( Subtraction three-digit 1)  
Add and subtract numbers up to 20 (Mixed Operations 1)  
Addition and subtraction word problems up to 100 (Mixed Operations 10)  
Place value models – tens and ones (Place Values 1)  
Place value model up to hundreds (Place Values 2)  
Equivalent amounts of money-up to \$1.00 (Money 6)  
Match analog clocks and times (Time 2)

### **Rising 4<sup>th</sup> Graders Math Topics from 3<sup>rd</sup> Grade Math Program**

Addition, subtraction, multiplication, and division facts (Mixed Operation 1)  
Complete the addition, subtraction, multiplication, or division sentences (M.O. 2)  
Multiplication and division facts up to 12; true or false? (M.O.5)  
Addition and subtraction word problems (M.O. 9)  
Addition, subtraction, multiplication, and division word problems (M.O. 12)  
Read a table (Data Graphs & Probabiblity 5)  
Two-Step mixed operations word problems (M.O. 16)  
Rounding puzzles (Estimation & Rounding 4)  
Purchases-do you have enough money? Up to \$10.00 (Money 3)  
Add and subtract money amounts (Money 9)  
Read clocks and write times (Time 3)  
Find equivalent fractions (Equivalent Fractions 7)

### **Rising 5<sup>th</sup> Graders Math Topics from 4<sup>th</sup> Grade Math Program**

Identify place value names (Number Sense 6)  
Convert between place values (Number Sense 5)  
Rounding: up to hundred thousands place (Number Sense 20)  
Multiply a 2-digit number by a larger number (Multiplication 41)  
Divide larger numbers by 1 digit numbers (Division 17)  
Addition, subtraction, multiplication, and division: word problems (Mixed Operations 4)  
Elapsed time; word problems (Time 7)  
Compare fractions using models (Fraction, equivalence & ordering 15)  
Add and subtract fractions with like denominators (Add & Subtract fractions with like denominators 14)  
Add fractions with unlike denominators (Add & Subtract fractions with unlike denominators 4)

Subtract fractions with unlike denominators (Add & Subtract fractions with unlike denominators 6)

Add and subtract mixed numbers with unlike denominators: word problems (Add & Subtract fractions with unlike denominators 7)

Add and subtract decimals; word problems (Add & Subtract decimals 4)

**Rising 5<sup>th</sup> Graders Honors Math from Mrs. Meskunas 4<sup>th</sup> Grade Honors class – use 5<sup>th</sup> grade list**

Divisibility Rules

Greatest Common Factor

Least Common Multiple

Add, Subtract, Multiply & Divide whole numbers: word problems

Evaluate numerical expressions with parenthesis

Add, Subtract, Multiply & Divide decimals: word problems

Add, Subtract, Multiply & Divide fractions: word problems

Convert between percents, fractions, and decimals

Interpret Charts and Graphs to find mode

Interpret Charts and Graphs to find mean

Interpret Charts and Graphs to find median

Interpret Charts and Graphs to find range

Find probability

Area of squares and rectangles with fractions

Area between two squares

**Rising 6<sup>th</sup> Graders Math Topics from 5<sup>th</sup> Grade Math Program**

Divisibility Rules (Number Theory 5)

Division Facts to 12: Word Problems (Division 2)

Prime Factorization (Number Theory 3)

Add, Subtract, Multiply, and Divide Decimals (Mixed Operations 11)

Add, Subtract, Multiply, and Divide Fractions And Mixed Numbers (M.O 13)

\*\*Students must be fluent in multiplication and division facts 0-12 when they begin 6<sup>th</sup> grade\*\*

**Rising 6<sup>th</sup> graders Honors Math from Meskunas 5<sup>th</sup> Grade Honors class – use 6<sup>th</sup> grade list**

Prime Factorization with exponents

Add and Subtract Integers: find the sign

Multiply integers: find the sign

Divide integers: find the sign

Evaluate numerical expressions involving integers

Add and subtract rational numbers

Multiply and divide rational numbers  
Ratios & rates: complete table and make graph  
Compare rates: word problems  
Solve percent word problems  
Graph points on a coordinate plane  
Distance between two points  
Write variable expressions: word problems  
Solve two-step equations  
Graph solutions to one-step inequality

**Rising 7<sup>th</sup> Graders from Mrs. Lanzarone's class – use 6<sup>th</sup> grade list**

GCF and LCM word problems  
Put a mix of decimals, fractions and mixed numbers in order  
Understand integers  
Add, Subtract, Multiply, or Divide Two Decimals  
Add, Subtract, Multiply, or Divide Two Fractions  
Solve the proportion  
Graph points on a coordinate plane  
Solve one step equations with whole numbers  
Perimeter  
Area of Rectangles and Squares  
\*\*\*Students must be fluent in multiplication or division facts 0-12\*\*\*  
There will be an assessment the first week of school on Math Facts.

**Rising 7H students from Meskunas 6 Honors – use 8<sup>th</sup> grade list**

Evaluate expressions using properties of exponents  
Multiply numbers written in scientific notation  
Divide numbers written in scientific notation  
Solve proportions: word problems  
Scale drawings  
Find constant of proportionality from a table  
Solve percent equation  
Percent change: word problems  
Simple interest  
Compound interest  
Interior angles of a polygon  
Find measures of complementary, supplementary, vertical and adjacent angles  
Transversals of parallel lines: find angle measures  
Side lengths and angle measures of similar figures  
Pythagorean Theorem: word problems  
Solve multi-step equations with fractional coefficients  
Find the number of solutions  
Graph solutions to multi-step inequalities  
Find slope from two points  
Write a linear equations from a graph

**Rising 8PA students from Mrs. Meskunas 7<sup>th</sup> grade class – use 7<sup>th</sup> grade list**

Scientific notation  
Add and subtract positive and negative decimals  
Add and subtract positive and negative fractions  
Add and subtract rational numbers  
Multiply and divide positive and negative decimals  
Multiply and divide positive and negative fractions  
Multiply and divide rational numbers  
Write an equivalent ratio  
Unit rates  
Solve proportions  
Solve percent equations  
Percent Change  
Identify terms and coefficients  
Multiply using distributive property  
Add and subtract linear expressions  
Factors of linear expressions

**Rising 8<sup>th</sup> graders from Mrs. Lanzarone's Class – going into Algebra – use 8<sup>th</sup> grade list**

Understand negative exponents  
Multiplication and division with exponents  
Evaluate expressions using properties of exponents  
Convert between decimals and fractions or mixed numbers  
Identify rational and irrational numbers  
Pythagorean Theorem: find the length of the hypotenuse  
Pythagorean Theorem: find the missing leg length  
Pythagorean Theorem: find the perimeter  
Converse of the Pythagorean Theorem: is it a right triangle?  
Write variable expressions: word problems  
Evaluate one variable expressions  
Evaluate multi-variable expressions  
Solve two-step equations  
Solve equations involving like terms  
Solve equations with variable on both sides  
Solve multi step equations  
Graph inequalities on number lines  
Write inequalities from number lines  
Graph solutions to two-step inequalities  
Graph solutions to multi-step inequalities

**Rising 8H Students going into Geometry – use Algebra I list**

Solve proportions: word problems  
Scale drawings: word problems  
Solve advanced linear equations  
Solve linear equations: mixed review  
Graph compound inequalities  
Solve compound inequalities  
Graph solutions to compound inequalities  
Solve absolute value equations  
Graph solutions to absolute value equations  
Solve absolute value inequalities  
Evaluate a function  
Evaluate a function: plug in an expression  
Complete a function table from an equation  
Find slope of a graph  
Find slope from two points  
Find the missing coordinate using slope  
Slope-intercept form: find the slope and y-intercept  
Slope-intercept form: graph an equation  
Slope-intercept form: write an equation from a graph  
Standard form: x- and y- intercepts