



SUMMER MATH REVIEW 2021

- ✚ **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

Rising 2nd Graders Math Topics from 1st 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 2nd 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 4th Graders Math Topics from 3rd 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 5th Graders Math Topics from 4th 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 5th Graders Math Topics from 4th Grade Math Program – Honors Math with Mrs. Meskunas (Use 5th grade list)

C	17	Multiply by 2-digit numbers: word problems
C	19	Multiply by 3-digit numbers
D	19	Multi-step word problems: multiplicative comparison
G	15	Convert fractions to decimals
G	18	Convert decimals to mixed numbers
G	21	Compare decimals and fractions
H	4	Add and Subtract Decimals: word problems
I	10	Multiply decimals and whole numbers: word problems
O	12	Add / Subtract / Multiply / Divide decimals : word problems
O	13	Add / Subtract / Multiply / Divide fractions and mixed numbers : word problems
P	4	Multi-Step word problems involving remainders
V	5	Interpret Bar Graphs: multi-step problems
V	16	Create Stem-and-Leaf Plot
W	9	Interpret charts and graphs to find the mode
W	10	Interpret charts and graphs to find the median
W	11	Interpret charts and graphs to find the mean
W	12	Interpret charts and graphs to find the range
Z	4	Points, lines, line segments, rays and angles
Z	8	Measure angles with a protractor Creating Bar Graphs

Rising 6th Graders Math Topics from 5th 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 6th grade****

Rising 6th Graders Math Topics from 5th Grade Math Program – Honors Math with Mrs. Meskunas (Use 6th Grade list)

D	2	Evaluate exponents
E	7	Prime factorization with exponents
E	12	GCF and LCM: word problems
M	9	Integer inequalities with absolute values
N	10	Add three or more integers
N	12	Multiply Integers
N	14	Divide Integers
O	3	Evaluate numerical expressions involving integers
R	8	Equivalent ratios: word problems
R	15	Ratios and Rates : word problems
S	4	Convert between percents, fractions and decimals
S	11	Percents of numbers: word problems
S	16	Solve percent problems
V	4	Unit prices with customary unit conversions
X	5	Distance between two points
Y	3	Write variable expressions: word problems
Y	13	Multiply using the distributive property
Y	14	Factor using the distributive property
Z	19	Solve two-step equations
AA	6	One-step inequalities : word problems

Rising 7th Graders Math Topics from 6th Grade Math Program

GCF and LCM word problems
Put a mix of decimals, fractions and mixed numbers in order
Perimeter
Area of Rectangles and Squares
Solve the proportion
Solve one step equations with whole numbers
Does (x,y) satisfy an equation
Find the missing angles in a triangle
Add, Subtract, Multiply, or Divide Two Decimals
Add, Subtract, Multiply, or Divide Two Fractions
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 7th graders going into Algebra with Mrs. Lanzarone (coming from Mrs. Meskunas' 6th grade Honors Math) Use 8th grade IXL list

Identify rational and irrational numbers
Convert between decimals and fractions or mixed numbers
Understanding negative exponents
Multiplication and division with exponents
Simplifying expressions involving exponents
Cube roots of perfect cubes

Solving equations with cubes and cube roots
Pythagorean theorem: find the length of the hypotenuse
Pythagorean theorem: find the missing leg length
Pythagorean theorem: find the perimeter
Converse of Pythagorean theorem: is it a right triangle?
Write variable expressions
Evaluate one variable expressions
Evaluate multi variable expressions
Solve one-step equations
Solve two-step equations
Solve multi-step equations
Solve equations involving like terms
Solving equations with variables on both sides
Graph inequalities on number lines
Write inequalities from number line
Graph one-step inequalities
Graph two-step inequalities

Rising 8th graders going into Algebra Use 8th grade IXL list

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

Rising 8th graders from Mrs. Lanzarone's 7A Algebra Class. Use IXL Algebra 1 list

Square roots
Add and subtract rational numbers
Multiply and divide rational numbers
Solve proportions: word problems
Scale drawings: word problems
Simplify variable expressions involving like terms and the distributive property
Solve one-step linear equations
Solve two-step linear equations
Solve advanced linear equations
Solve linear equations: word problems
Solve one-step linear inequalities
Solve two-step linear inequalities
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 the y- intercept
Slope-intercept form: graph an equation
Slope-intercept form: write an equation from a graph
Standard form: x- and y- intercepts

Rising 8th Graders from Mrs. Meskunas – Use 7th Grade List

C	12	Add and subtract integers
C	21	Multiply and divide integers
C	23	Add, Subtract, Multiply and Divide integers
E	8	Add / Subtract / Multiply / Divide decimals : word problems
F	3	Write fractions in lowest terms
F	8	Convert between mixed numbers and improper fractions
G	16	Add / Subtract / Multiply / Divide fractions and mixed numbers: word problems
H	4	Identify rational numbers
H	17	Multiply and divide rational numbers
I	2	Evaluate exponents
I	7	Evaluate numerical expressions involving exponents

I	9	Estimate square roots
J	11	Solve Proportions
L	2	Convert between percents, fractions and decimals
L	6	Percents of numbers: word problems
L	7	Solve percent equations
L	9	Percent of change
R	3	Write variable expressions: Word problems
R	13	Write equivalent expressions using properties
R	18	Identify equivalent linear expressions I