

# 4th ->5th Grade Level Math Summer Assignments

Do the following IXLs UNDER 4TH GRADE to a Smart Score of 85.

Please don't hesitate to contact me if you have any problems or concerns. [faws5@fatherandrewwhite.org](mailto:faws5@fatherandrewwhite.org)

## 4th Grade IXL.COM

### Number sense

- A.2** Convert between standard and expanded form
- A.3** Value of a digit
- A.4** Convert between place values
- A.5** Identify place value names
- A.7** Writing numbers up to 1,000 in words: convert words to digits
- A.8** Writing numbers up to 1,000 in words: convert digits to words
- A.9** Writing numbers up to 100,000 in words: convert words to digits
- A.10** Writing numbers up to 100,000 in words: convert digits to words

### Addition

- B.1** Add numbers up to 5 digits.

### Subtraction

- C.1** Subtract numbers up to 5 digits

### Multiplication

- D.4** Multiplication facts to 12
- D.17** Multiply 1-digit number by larger numbers

### Division

- E.3** Division facts to 12
- E.6** Divide 2-digit numbers by 1-digit numbers
- E.23** Divide by 2-digit numbers

### Mixed operations

- F.1** Add, subtract, multiply, and divide

### Coordinate plane

- I.1** Objects on a coordinate plane

### Data and graphs

- J.1** Read a table
- J.2** Interpret line graphs
- J.4** Interpret bar graphs
- J.6** Interpret line plots
- J.12** Circle graphs

### Money

- M.1** Count coins and bills - up to \$20 bill
- M.3** Compare money amounts
- M.5** Add and subtract money amounts
- M.7** Find the change, price or amount paid

## Units of measurement

**N.1** Measure using an inch ruler

## Time

**O.1** Convert time units

**O.3** Add and subtract mixed time units

## Fraction equivalence and ordering

**P.1** Fractions review

**P.7** Identify equivalent fractions

## Add and subtract fractions with like denominators

**Q.9** Add and subtract fractions with like denominators

## Multiply fractions

**S.12** Multiply fractions by whole numbers

## Decimals

**T.1** What decimal number is illustrated?

**T.3** Understanding decimals expressed in words

**T.4** Place values in decimal numbers

**T.12** Convert decimals between standard and expanded form using fractions

## Add and subtract decimals

**U.1** Add decimal numbers

**U.2** Subtract decimal numbers

## Probability and statistics

**V.1** Understanding probability

**V.2** Find the probability

## Two-dimensional figures

**W.2** Is it a polygon?

**W.3** Number of sides in polygons

**W.4** Lines, line segments, and rays

**W.5** Parallel, perpendicular, and intersecting lines

**W.7** Parts of a circle

## Symmetry

**Y.1** Identify lines of symmetry

**Y.2** Draw lines of symmetry

**Y.3** Count lines of symmetry

## Angles

**Z.1** Acute, right, obtuse, and straight angles

## Three-dimensional figures

**AA.1** Identify three-dimensional figures

**AA.2** Count vertices, edges, and faces

## Geometric measurement

**BB.1** Perimeter of rectangles

# 4th ->5th Advanced Math Summer Assignments

Do the following IXLs UNDER 5TH GRADE to a Smart Score of 85.

Please don't hesitate to contact me if you have any problems or concerns.

[faws5@fatherandrewwhite.org](mailto:faws5@fatherandrewwhite.org)

## 5th Grade IXL.COM

### Place values and number sense

A.1 Convert between standard and expanded form

A.2 Place value

A.3 Compare numbers up to billions

A.4 Writing numbers in words: convert words to digits

A.5 Writing numbers in words: convert digits to words

A.7 Roman numerals

A.10 Understanding integers

A.11 Compare integers

A.12 Put integers in order

### Addition and subtraction

B.1 Add and subtract whole numbers up to billions

B.6 Properties of addition

### Multiplication

C.4 Multiply numbers ending in zeroes

C.6 Properties of multiplication

C.13 Multiply 2-digit numbers by 2-digit numbers

C.14 Multiply 2-digit numbers by 3-digit numbers

### Division

D.1 Division facts to 12

D.3 Divide multi-digit numbers by 1-digit numbers

D.5 Divide by 1-digit numbers: interpret remainders

D.7 Divide numbers ending in zeroes

D.11 Divide 2-digit and 3-digit numbers by 2-digit numbers

### Exponents

E.1 Understanding exponents

### Decimals

G.3 Understanding decimals expressed in words

G.4 Place values in decimal numbers

G.5Convert decimals between standard and expanded form

**Add and subtract decimals**

H.3Add and subtract decimal numbers

**Multiply decimals**

I.2Multiply a decimal by a power of ten

I.3Multiply a decimal by a one-digit whole number

**Fractions and mixed numbers**

K.4Equivalent fractions

K.5Write fractions in lowest terms

**Add and subtract fractions**

L.3Add and subtract fractions with like denominators

**Percents**

R.2Convert between percents, fractions, and decimals

**Coordinate plane**

U.1Objects on a coordinate plane

U.2Graph points on a coordinate plane

**Data and graphs**

W.2Interpret line graphs

W.4Interpret bar graphs

W.6Interpret pictographs

**Probability and statistics**

X.1 Find the Mode

X.2 Find the Mean

X.3 Find the Median

X.4 Find the range

X.14Find the probability

**Three-dimensional figures**

DD.1Identify three-dimensional figures

DD.2Count vertices, edges, and faces

DD.3Nets of three-dimensional figures

**Geometric measurement**

EE.1Perimeter with whole number side lengths

EE.5Area of squares and rectangles

# 5th-> 6th Grade Level Math Summer Assignments

Do the following IXLs UNDER 5TH GRADE to a Smart Score of 85.

Please don't hesitate to contact me if you have any problems or concerns. faws6@fatherandrewwhite.

## 5th Grade IXL.COM

### Place values and number sense

- A.1** Convert between standard and expanded form
- A.2** Place value
- A.3** Compare numbers up to billions
- A.4** Writing numbers in words: convert digits to words
- A.8** Rounding

### Addition and subtraction

- B.1** Add and subtract whole numbers up to billions
- B.6** Properties of addition

### Multiplication

- C.1** Multiply by 1-digit numbers
- C.3** Multiplication patterns over increasing place values
- C.4** Multiply numbers ending in zeroes
- C.6** Properties of multiplication
- C.13** Multiply 2-digit numbers by 2-digit numbers
- C.14** Multiply 2-digit numbers by 3-digit numbers
- C.18** Multiply by 3-digit numbers

### Division

- D.1** Division facts to 12
- D.3** Divide multi-digit numbers by 1-digit numbers
- D.7** Divide numbers ending in zeroes
- D.11** Divide 2-digit and 3-digit numbers by 2-digit numbers

### Exponents

- E.1** Understanding exponents

### Number theory

- F.6** Greatest common factor
- F.8** Least common multiple

### Decimals

- G.4** Place values in decimal numbers
- G.11** Put decimal numbers in order
- G.12** Convert fractions to decimals

**G.14**Convert decimals to fractions

**Add and subtract decimals**

**H.3**Add and subtract decimal numbers

**Multiply decimals**

**I.3**Multiply a decimal by a one-digit whole number

**I.4**Multiply a decimal by a multi-digit whole number

**Fractions and mixed numbers**

**K.1**Fractions review

**K.4**Equivalent fractions

**K.5**Write fractions in lowest terms

**K.6**Convert between improper fractions and mixed numbers

**Add and subtract fractions**

**L.3**Add and subtract fractions with like denominators

**L.5**Add and subtract mixed numbers with like denominators

**L.8**Add fractions with unlike denominators

**L.10**Subtract fractions with unlike denominators

**Multiply fractions**

**M.11**Multiply fractions by whole numbers I

**M.20**Multiply two fractions

**M.32**Multiply a mixed number by a whole number

**M.33**Multiply a mixed number by a fraction

**Divide fractions**

**N.4**Divide whole numbers and unit fractions

**N.5**Divide fractions by whole numbers

**N.8**Divide whole numbers by fractions

**N.9**Divide two fractions

**N.10**Divide fractions and mixed numbers

**Percents**

**R.1**What percentage is illustrated?

**R.2**Convert between percents, fractions, and decimals

## 5th ->6th Advanced Math Summer Assignments

**Do the following IXLs UNDER 6TH GRADE to a Smart Score of 85.**

Please don't hesitate to contact me if you have any problems or concerns.

[fawasalgebra@fatherandrewwhite.org](mailto:fawasalgebra@fatherandrewwhite.org)

## 6th Grade IXL.COM

**D.1** Write multiplication expressions using exponents

**D.2** Evaluate exponents

**D.11** Square roots of perfect squares

### Number theory

**E.4** Identify factors

**E.5** Prime factorization

**E.6** Prime factorization with exponents

**E.7** Greatest common factor

**E.9** Least common multiple

### Decimals

**F.4** Put decimal numbers in order

### Add and subtract decimals

**G.1** Add and subtract decimal numbers

### Multiply and divide decimals

**H.2** Multiply decimals

**H.4** Divide decimals by whole numbers

**H.6** Multiply and divide decimals by powers of ten

**H.7** Division with decimal quotients

### Fractions and mixed numbers

**I.6** Least common denominator

**I.9** Convert between improper fractions and mixed numbers

**I.10** Convert fractions to decimals

### Add and subtract fractions

**J.3** Add and subtract fractions with unlike denominators

**J.6** Add and subtract mixed numbers

### Multiply fractions

**K.6** Multiply two fractions

**K.10** Multiply three or more fractions and whole numbers

**K.12** Multiply mixed numbers and whole numbers

**K.13** Multiply mixed numbers

**K.15** Multiply three or more mixed numbers, fractions, and/or whole numbers

### Divide fractions

**L.2** Reciprocals

**L.3** Divide whole numbers and unit fractions

**L.5** Divide fractions

**L.7** Divide fractions and mixed numbers

**Integers**

**M.1** Understanding integers

**M.2** Integers on number lines

**M.3** Graph integers on horizontal and vertical number lines

**M.6** Compare integers

**M.7** Put integers in order

**Mixed operations**

**O.1** Add, subtract, multiply, or divide two whole numbers

**O.3** Evaluate numerical expressions involving whole numbers

**O.4** Add, subtract, multiply, or divide two decimals

**O.7** Add, subtract, multiply, or divide two fractions

**Coordinate plane**

**X.1** Objects on a coordinate plane

**X.2** Graph points on a coordinate plane

**X.3** Quadrants

**Two-dimensional figures**

**CC.1** Identify and classify polygons

**CC.2** Measure and classify angles

**CC.4** Classify triangles

**CC.6** Identify trapezoids

**CC.7** Classify quadrilaterals

**CC.8** Graph triangles and quadrilaterals

**CC.9** Find missing angles in triangles

**CC.11** Find missing angles in quadrilaterals

**CC.13** Lines, line segments, and rays

**CC.14** Name angles

**CC.15** Complementary and supplementary angles

**CC.17** Find the measures of complementary, supplementary, vertical, and

**CC.19** Parts of a circle

**CC.20** Central angles of circles

**Geometric measurement**

**FF.1** Perimeter

**FF.2** Area of rectangles and squares

**FF.3** Area of triangles



# 6th ->7th Math Summer Assignments for Grade Level Group

Do the following IXLs UNDER 6TH GRADE to a Smart Score of 85.

Please don't hesitate to contact me if you have any problems or concerns.

faws7@fatherandrewwhite.org

## 6th Grade IXL.COM

### Exponents and square roots

**D.1** Write multiplication expressions using exponents

**D.2** Evaluate exponents

**D.11** Square roots of perfect squares

### Number theory

**E.4** Identify factors

**E.5** Prime factorization

**E.6** Prime factorization with exponents

**E.7** Greatest common factor

**E.9** Least common multiple

### Decimals

**F.4** Put decimal numbers in order

### Add and subtract decimals

**G.1** Add and subtract decimal numbers

### Multiply and divide decimals

**H.2** Multiply decimals

**H.4** Divide decimals by whole numbers

**H.6** Multiply and divide decimals by powers of ten

**H.7** Division with decimal quotients

### Fractions and mixed numbers

**I.6** Least common denominator

**I.9** Convert between improper fractions and mixed numbers

**I.12** Convert between decimals and fractions

### Add and subtract fractions

**J.3** Add and subtract fractions with unlike denominators

**J.6** Add and subtract mixed numbers

### Multiply fractions

**K.6** Multiply two fractions

**K.10** Multiply three or more fractions and whole numbers

**K.12** Multiply mixed numbers and whole numbers

**K.13** Multiply mixed numbers

**K.15** Multiply three or more mixed numbers, fractions, and/or whole numbers

## **Divide fractions**

**L.2**Reciprocals

**L.3**Divide whole numbers and unit fractions

**L.5**Divide fractions

**L.7**Divide fractions and mixed numbers

## **Integers**

**M.1**Understanding integers

**M.2**Integers on number lines

**M.3**Graph integers on horizontal and vertical number lines

**M.6**Compare integers

**M.7**Put integers in order

## **Mixed operations**

**O.1**Add, subtract, multiply, or divide two whole numbers

**O.3**Evaluate numerical expressions involving whole numbers

**O.4**Add, subtract, multiply, or divide two decimals

**O.7**Add, subtract, multiply, or divide two fractions

## **Coordinate plane**

**X.1**Objects on a coordinate plane

**X.2**Graph points on a coordinate plane

**X.3**Quadrants

## **Two-dimensional figures**

**CC.1**Identify and classify polygons

**CC.2**Measure and classify angles

**CC.4**Classify triangles

**CC.6**Identify trapezoids

**CC.7**Classify quadrilaterals

**CC.8**Graph triangles and quadrilaterals

**CC.9**Find missing angles in triangles

**CC.11**Find missing angles in quadrilaterals

**CC.13**Lines, line segments, and rays

**CC.14**Name angles

**CC.15**Complementary and supplementary angles

**CC.17**Find the measures of complementary, supplementary, vertical, and adjacent

**CC.19**Parts of a circle

## **Geometric measurement**

**FF.3**Area of triangles

# 6th ->7th Summer Assignments for Advanced Group

Do the following IXLs UNDER 7TH GRADE to a Smart Score of 85.

Please don't hesitate to contact me if you have any problems or concerns.

[fawsalgebra@fatherandrewwhite.org](mailto:fawsalgebra@fatherandrewwhite.org)

## 7th Grade IXL.COM

### Number theory

**A.3**Multiplicative inverses

**A.5**Greatest common factor

**A.6**Least common multiple

**A.9**Scientific notation

### Operations with integers

**C.9**Add and subtract integers

**C.17**Multiply and divide integers

### Operations with decimals

**E.3**Multiply decimals

**E.5**Divide decimals

### Operations with fractions

**G.3**Add and subtract mixed numbers

**G.7**Multiply fractions and whole numbers

**G.10**Multiply mixed numbers

**G.13**Divide mixed numbers

### Exponents and square roots

**I.2**Evaluate exponents

**I.4**Exponents with negative bases

**I.10**Square roots of perfect squares

**I.11**Estimate square roots

### Ratios, rates, and proportions

**J.9**Do the ratios form a proportion?

**J.11**Solve proportions

### Percents

**L.2**Convert between percents, fractions, and decimals

### Expressions and properties

**R.10**Properties of addition and multiplication

**R.11**Multiply using the distributive property

**R.15**Add and subtract like terms

### One-variable equations

**S.1** Which  $x$  satisfies an equation?

**S.6** Solve two-step equations

**S.8** Solve equations involving like terms

**One-variable inequalities**

**T.3** Write inequalities from number lines

**T.4** Solve one-step inequalities

**T.5** Graph solutions to one-step inequalities

**T.6** Solve two-step inequalities

**T.7** Graph solutions to two-step inequalities

**Linear functions**

**V.1** Find the slope from a graph

**Two-dimensional figures**

**W.1** Identify and classify polygons

**W.3** Classify triangles

**W.5** Identify trapezoids

**W.6** Classify quadrilaterals

**W.9** Find missing angles in triangles

**W.11** Find missing angles in quadrilaterals

**W.14** Lines, line segments, and rays

**W.15** Parallel, perpendicular, and intersecting lines

**W.16** Identify complementary, supplementary, vertical, adjacent, and congruent angles

**W.17** Find measures of complementary, supplementary, vertical, and adjacent angles

**W.22** Parts of a circle

**Geometric measurement**

**AA.1** Perimeter

**AA.2** Area of rectangles and parallelograms

**AA.3** Area of triangles and trapezoids

**AA.5** Circles: calculate area, circumference, radius, and diameter

**AA.7** Volume of cubes and prisms

**AA.11** Surface area of cubes and prisms

## 7th ->8th Grade Level Math Summer Assignments

Do the following IXLs UNDER 7TH GRADE to a Smart Score of 85.

Please don't hesitate to contact me if you have any problems or concerns.

[faws8@fatherandrewwhite.org](mailto:faws8@fatherandrewwhite.org)

## 7th Grade IXL.COM

### Number theory

**A.3**Multiplicative inverses

**A.5**Greatest common factor

**A.6**Least common multiple

**A.9**Scientific notation

### Operations with integers

**C.9**Add and subtract integers

**C.17**Multiply and divide integers

### Operations with decimals

**E.3**Multiply decimals

**E.5**Divide decimals

### Operations with fractions

**G.3**Add and subtract mixed numbers

**G.7**Multiply fractions and whole numbers

**G.10**Multiply mixed numbers

**G.13**Divide mixed numbers

### Rational numbers

**H.10**Add and subtract rational numbers

**H.15**Multiply and divide rational numbers

### Exponents and square roots

**I.1**Understanding exponents

**I.2**Evaluate exponents

**I.4**Exponents with negative bases

**I.10**Square roots of perfect squares

**I.11**Estimate square roots

### Ratios, rates, and proportions

**J.1**Understanding ratios

**J.9**Do the ratios form a proportion?

**J.11**Solve proportions

### Percents

**L.2**Convert between percents, fractions, and decimals

## Expressions and properties

**R.10** Properties of addition and multiplication

**R.11** Multiply using the distributive property

**R.15** Add and subtract like terms

## One-variable equations

**S.1** Which  $x$  satisfies an equation?

**S.6** Solve two-step equations

**S.8** Solve equations involving like terms

## One-variable inequalities

**T.3** Write inequalities from number lines

**T.4** Solve one-step inequalities

**T.5** Graph solutions to one-step inequalities

**T.6** Solve two-step inequalities

**T.7** Graph solutions to two-step inequalities

## Two-variable equations

**U.5** Complete a table for a two-variable relationship

## Linear functions

**V.1** Find the slope from a graph

## Two-dimensional figures

**W.1** Identify and classify polygons

**W.3** Classify triangles

**W.5** Identify trapezoids

**W.6** Classify quadrilaterals

**W.9** Find missing angles in triangles

**W.11** Find missing angles in quadrilaterals

**W.14** Lines, line segments, and rays

**W.15** Parallel, perpendicular, and intersecting lines

**W.16** Identify complementary, supplementary, vertical, adjacent, and congruent angles

**W.17** Find measures of complementary, supplementary, vertical, and adjacent angles

**W.22** Parts of a circle

## Geometric measurement

**AA.1** Perimeter

**AA.2** Area of rectangles and parallelograms

**AA.3** Area of triangles and trapezoids

**AA.5** Circles: calculate area, circumference, radius, and diameter

**AA.7** Volume

**AA.11** Surface area

## 7th ->8th Summer Assignments For Advanced Group

Do the following IXLs UNDER 8TH GRADE to a Smart Score of 85.

Please don't hesitate to contact me if you have any problems or concerns.

[fawsalgebra@fatherandrewwhite.org](mailto:fawsalgebra@fatherandrewwhite.org)

### 8th Grade IXL.COM

#### Operations with rational numbers

**E.1** Reciprocals and multiplicative inverses

#### Exponents and roots

**F.2** Evaluate exponents

**F.4** Exponents with negative bases

**F.6** Understanding negative exponents

**F.7** Evaluate negative exponents

**F.8** Multiplication with exponents

**F.9** Division with exponents

**F.10** Multiplication and division with exponents

**F.11** Power rule

**F.12** Evaluate expressions using properties of exponents

**F.18** Relationship between squares and square roots

#### Scientific notation

**G.3** Multiply numbers written in scientific notation

**G.4** Divide numbers written in scientific notation

#### Ratios, rates, and proportions

**H.10** Solve proportions

#### Proportional relationships

**I.1** Find the constant of proportionality from a table

**I.6** Identify proportional relationships from graphs and equations

**I.8** Graph proportional relationships

#### Percents

**J.1** Convert between percents, fractions, and decimals

#### Consumer math

**K.6** Find the percent: tax, discount, and more

#### Two-dimensional figures

**O.7** Find missing angles in triangles

**O.9** Find missing angles in quadrilaterals 1

**O.13** Identify complementary, supplementary, vertical, adjacent, and congruent angles

**O.14** Find measures of complementary, supplementary, vertical, and adjacent angles

**O.16** Transversal of parallel lines

**O.19**Parts of a circle

**Pythagorean theorem**

**R.5**Converse of the Pythagorean theorem: is it a right triangle?

**Expressions and properties**

**V.12**Properties of addition and multiplication

**V.13**Multiply using the distributive property

**V.15**Add and subtract like terms

**One-variable equations**

**W.11**Solve equations with variables on both sides

**One-variable inequalities**

**X.2**Graph inequalities on number lines

**X.3**Write inequalities from number lines

**X.8**Solve multi-step inequalities

**X.9**Graph solutions to multi-step inequalities

**Linear equations**

**Y.1**Find the slope of a graph

**Y.2**Find the slope from two points

**Y.5**Graph a line using slope

**Y.6**Graph a line from an equation in slope-intercept form

**Y.7**Write a linear equation from a slope and y-intercept

**Y.8**Write a linear equation from a graph

**Systems of linear equations**

**AA.1**Is  $(x, y)$  a solution to the system of equations?

**Monomials and polynomials**

**BB.1**Identify monomials

**BB.4**Add and subtract polynomials

**BB.5**Add polynomials to find perimeter

**BB.8**Multiply and divide monomials

**BB.9**Powers of monomials

**BB.12**Multiply polynomials

**Probability**

**EE.1**Probability of simple events

**EE.5**Compound events: find the number of outcomes