

## 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