

PreAlgebra

Summer IXL Extra Credit Opportunity:

Hello Wonderful PreAlgebra students,

I hope you are having a great start to summer! You will have a special opportunity to get extra credit over the summer. **This summer work will allow you to replace your lowest test score of the 1st Quarter with up to a 100%.**

Typically, students are given a packet of math pages to complete over the summer, and just as typically, many will either hurriedly work through the pages to complete them (getting them DONE), or wait until the end of summer and rush to finish the pages before school starts. Neither of these scenarios is helpful, so this summer the math department is using IXL. The goal is not to "ruin" your summer vacation; instead the goal is to keep your working knowledge of mathematical skills fresh.

Here is the list of the math skills all incoming PreAlgebra students should review over the summer. Each student may choose up to 100 of the sections below to a **score of 75** by working 15-20 minutes per day over the summer vacation. Please do not try to finish all the assignments at the beginning of summer just to, "Get them done." Instead, build the habit of 15-20 minutes per day. This will keep your mind mathematically engaged through the summer and will enable you to start the new year "running!" The PreAlgebra course requires that you have a mastery of junior high math skills in order to be truly ready and able to achieve real success for the next school year. The 15-20 minutes per day should not be burdensome and reaching a **score of 75** in each section is not too difficult. The 15-20 minutes you spend each day will keep you primed and ready to tackle next year's adventure in mathematics!

Have a wonderful summer! Please email me (Mr. Sanchez) gsanchez@cvcs.org if you have questions regarding the extra credit assignment.

In addition, it would be very helpful for all PreAlgebra students to purchase the book over the summer so you can bring your book and be prepared on the first day of school. The book on Amazon is very affordable. Here is what you need: **Passport to Algebra and Geometry, McDougal Littell 1999; ISBN #: 0-395-87988-4**

Mr. Sanchez

Here are all the assigned sections of IXL for PreAlgebra (you will be completing the **7th grade math** sections). You may choose up to 100 sections *to a score of 75 from the given list below*. If you complete 100 sections to a score of 75, then you can replace your lowest test score of the 1st quarter with a 100%. If you complete 85 of the sections to a score of 75, then you can replace your lowest test score with an 85% and so on.

Log on to the website: www.ixl.com/signin/cvcs. Then put in your username and password and begin the extra credit opportunity by clicking on the icon "Math" at the top of the page and then selecting "**7th grade math**". Once you click on 7th grade math, you will see the following sections to complete-Choose only the sections I have listed below. Any other sections will not earn extra credit! I will be able to see your progress throughout the summer. This is summer work and must be completed by the first day of school in order to receive the extra credit.

Sometimes IXL changes the section numbers around, **so follow the section title** if for some reason the number and the title do not match up. Remember, you only need to complete each section to a **score of 75**.

Username:

Password:

Please try to log on to IXL with your username and password to confirm that it works as soon as possible. If you are having trouble with your username and/or password email me before July 8th.

A. Number theory

1. A1 Prime or composite
2. A2 Prime factorization
3. A4 Divisibility rules
4. A5 Greatest common factor
5. A6 Least common multiple
6. A7 GCF and LCM: word problems
7. A11 Classify numbers

B. Integers

1. B1 Understanding integers
2. B2 Integers on number lines
3. B3 Graph integers on horizontal and vertical number lines
4. B6 Compare and order integers

C. Operations with integers

1. C4 Add integers
2. C5 Add three or more integers
3. C6 Integer subtraction rules
4. C9 Subtract integers
5. C10 Integer addition and subtraction rules
6. C12 Add and subtract integers
7. C13 Complete addition and subtraction equations with integers
8. C15 Integer multiplication rules
9. C16 Multiply integers
10. C17 Integer division rules
11. C19 Divide integers
12. C20 Integer multiplication and division rules
13. C21 Multiply and divide integers
14. C22 Complete multiplication and division equations with integers
15. C23 Add, subtract, multiply, and divide integers

D. Decimals

1. D1 Decimal numbers review
2. D2 Compare and order decimals
3. D4 Round decimals

E. Operations with decimals

1. E1 Add and subtract decimals
2. E3 Multiply decimals
3. E5 Divide decimals
4. E8 Add, subtract, multiply, and divide decimals: word problems

F. Fractions and mixed numbers

1. F1 Understanding fractions: word problems
2. F2 Equivalent fractions
3. F3 Write fractions in lowest terms
4. F5 Least common denominator
5. F6 Compare and order fractions
6. F8 Convert between mixed numbers and improper fractions
7. F9 Compare mixed numbers and improper fractions

G. Operations with fractions

1. G1 Add and subtract fractions
2. G3 Add and subtract mixed numbers
3. G5 Inequalities with addition and subtraction of fractions and mixed numbers
4. G7 Multiply fractions and whole numbers
5. G9 Multiply fractions
6. G10 Multiply mixed numbers

7. G12 Divide fractions
8. G13 Divide mixed numbers
9. G16 Add, subtract, multiply, and divide fractions and mixed numbers: word problems
10. G18 Evaluate numerical expressions involving fractions

H. Rational numbers

1. H1 Convert fractions or mixed numbers to decimals
2. H2 Convert decimals to fractions or mixed numbers
3. H3 Convert between decimals and fractions or mixed numbers
4. H4 Identify rational numbers
5. H6 Absolute value of rational numbers
6. H8 Put rational numbers in order
7. H9 Add and subtract positive and negative decimals
8. H10 Add and subtract positive and negative fractions
9. H11 Add and subtract rational numbers
10. H16 Multiply and divide positive and negative fractions

I. Exponents and square roots

1. I1 Understanding exponents
2. I2 Evaluate exponents
3. I3 Solve equations with variable exponents
4. I4 Exponents with negative bases
5. I8 Square roots of perfect squares
6. I9 Estimate square roots

J. Ratios, rates, and proportions

1. J1 Understanding ratios
2. J2 Identify equivalent ratios
3. J3 Write an equivalent ratio
4. J5 Unit rates
5. J11 Do the ratios form a proportion?
6. J12 Do the ratios form a proportion: word problems
7. J13 Solve proportions
8. J14 Solve proportions: word problems

L. Percents

1. L2 Convert between percents, fractions, and decimals
2. L3 Compare percents to fractions and decimals
3. L7 Solve percent equations
4. L9 Percent of change
5. L10 Percent of change: word problems

M. Consumer math

1. M1 Add, subtract, multiply, and divide money amounts: word problems
2. M3 Unit prices
3. M6 Percent of a number: tax, discount, and more
4. M8 Find the percent: tax, discount, and more
5. M12 Simple interest
6. M13 Compound interest

P. Coordinate plane

1. P1 Coordinate plane review
2. P2 Quadrants and axes
3. P3 Follow directions on a coordinate plane
4. P4 Distance between two points

R. Expressions and properties

1. R1 Write variable expressions: one operation
2. R2 Write variable expressions: two or three operations
3. R3 Write variable expressions: word problems
4. R4 Evaluate linear expressions
5. R5 Evaluate multi-variable expressions
6. R8 Identify terms and coefficients
7. R10 Properties of addition and multiplication
8. R11 Multiply using the distributive property
9. R12 Solve equations using properties
10. R14 Add and subtract linear expressions
11. R15 Add and subtract like terms: with exponents

S. One-variable equations

1. S1 Which x satisfies an equation?
2. S2 Write an equation from words
3. S5 Solve one-step equations
4. S6 Solve two-step equations
5. S7 Solve equations: word problems
6. S8 Solve equations involving like terms

T. One-variable inequalities

1. T1 Solutions to inequalities
2. T2 Graph inequalities on number lines
3. T3 Write inequalities from number lines
4. T4 Solve one-step inequalities
5. T5 Graph solutions to one-step inequalities
6. T7 Solve two-step inequalities
7. T8 Graph solutions to two-step inequalities

U. Two-variable equations

1. U1 Does (x, y) satisfy the equation?
2. U2 Identify independent and dependent variables
3. U3 Find a value using two-variable equations

V. Linear functions

1. V1 Find the slope from a graph
2. V2 Find the slope from two points