

CPHS IXL Summer Assignments 2019:

Review all skills listed below the course you will be attending in September. Review any skill you are unfamiliar with. Please try to get an 80% or better before going to the next skill.

There will be a Benchmark exam on the skills below when you return to school.

Extra help can be found on Khan Academy, under the appropriate tab:

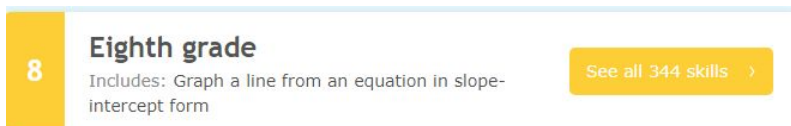
<https://www.khanacademy.org/math/math-1-2-3#algebra1>

<https://www.khanacademy.org/math/math-1-2-3/geometry>

<https://www.khanacademy.org/math/math-1-2-3#algebra2>

The IXL student Accounts will be available by July 1st. If you have problems please email Ms. Clarke at mclarke@cliffsidepark.edu.

Pre-Algebra: (under Eighth Grade Skills)



8 **Eighth grade**
Includes: Graph a line from an equation in slope-intercept form

See all 344 skills >

Rational numbers

- D.1 Write fractions in lowest terms
- D.2 Least common denominator
- D.3 Round decimals and mixed numbers
- D.4 Convert between decimals and fractions or mixed numbers
- D.5 Identify rational and irrational numbers
- D.6 Absolute value of rational numbers
- D.7 Compare rational numbers
- D.8 Put rational numbers in order

Operations with rational numbers

- E.1 Reciprocals and multiplicative inverses
- E.2 Add and subtract rational numbers
- E.3 Add and subtract rational numbers: word problems
- E.4 Apply addition and subtraction rules
- E.5 Multiply and divide rational numbers
- E.6 Multiply and divide rational numbers: word problems
- E.7 Apply multiplication and division rules
- E.8 Apply addition, subtraction, multiplication, and division rules
- E.9 Evaluate numerical expressions involving rational numbers

CPHS IXL Summer Assignments 2019:

Algebra 1:

A1

Algebra 1

Includes: Solve a system of equations by graphing |
Match quadratic functions and graphs

[See all 326 skills >](#)

Variable expressions and equations

I.5 Write variable equations

Solve equations

J.3 Solve one-step linear equations

J.4 Solve two-step linear equations

J.5 Solve advanced linear equations

J.6 Solve equations with variables on both sides

Linear functions

S.3 Find the slope of a graph

S.4 Find the slope from two points

S.7 Slope-intercept form: graph an equation

S.8 Slope-intercept form: write an equation from a graph

S.10 Slope-intercept form: write an equation from a table

S.12 Linear equations: solve for y

Exponents

V.4 Multiplication with exponents


V.5 Division with exponents

V.7 Power rule

CPHS IXL Summer Assignments 2019:

Geometry:

Do Skills under Geometry AND Skills under Algebra 1



Geometry

Includes: Prove similarity statements | Construct a perpendicular line


[See all 235 skills >](#)

Lines in the coordinate plane

- E.3 Graph a linear equation
- E.4 Equations of lines
- E.5 Slopes of parallel and perpendicular lines

Algebra review

- A.1 Ratios and proportions
- A.2 Scale drawings: word problems
- A.4 Simplify radical expressions



Algebra 1

Includes: Solve a system of equations by graphing | Match quadratic functions and graphs

[See all 326 skills >](#)

Solve equations

- J.5 Solve advanced linear equations
- J.6 Solve equations with variables on both sides

Numbers

- A.9 Classify rational and irrational numbers
- A.10 Classify numbers

Geometry

- F.1 Perimeter
- F.2 Area
- F.9 Area and perimeter of similar figures

Radical expressions

- EE.1 Simplify radical expressions
- EE.3 Simplify radical expressions involving fractions

Geometry

- F.17 Pythagorean theorem: word problems
- F.18 Converse of the Pythagorean theorem: is it a right triangle?

Polynomials

- Z.9 Multiply two binomials: special cases

CPHS IXL Summer Assignments 2019:

Algebra 2:

A2

Algebra 2

Includes: Match polynomials and graphs | Graph sine and cosine functions | Transformations of functions

[See all 337 skills >](#)

Functions

- D.1 Domain and range
- D.2 Identify functions
- D.3 Evaluate functions
- D.4 Find values using function graphs
- D.6 Find the slope of a linear function
- D.7 Graph a linear function

Equations

- B.1 Solve linear equations
- B.2 Solve linear equations: word problems

Systems of equations

- E.6 Solve a system of equations using substitution
- E.8 Solve a system of equations using elimination

Factoring

- I.3 Factor quadratics
- I.5 Factor by grouping
- I.7 Factor polynomials

CPHS IXL Summer Assignments 2019:

Transitional Math:

A1

Algebra 1

Includes: Solve a system of equations by graphing |
Match quadratic functions and graphs

See all 326 skills >

Linear functions

- S.1 Identify linear functions from graphs and equations
 - S.2 Identify linear functions from tables
 - S.3 Find the slope of a graph
 - S.4 Find the slope from two points
 - S.5 Find a missing coordinate using slope
 - S.6 Slope-intercept form: find the slope and y-intercept
 - S.7 Slope-intercept form: graph an equation
 - S.8 Slope-intercept form: write an equation from a graph
 - S.9 Slope-intercept form: write an equation
 - S.10 Slope-intercept form: write an equation from a table
 - S.11 Slope-intercept form: write an equation from a word problem
 - S.12 Linear equations: solve for y
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- S.25 Slopes of parallel and perpendicular lines
 - S.26 Write an equation for a parallel or perpendicular line

Systems of linear equations

- U.1 Is (x, y) a solution to the system of equations?
- U.2 Solve a system of equations by graphing
- U.3 Solve a system of equations by graphing: word problems
- U.4 Find the number of solutions to a system of equations by graphing
- U.8 Solve a system of equations using substitution
- U.10 Solve a system of equations using elimination
- U.14 Solve a system of equations using any method
- U.15 Solve a system of equations using any method: word problems

Solve equations

- J.1 Model and solve equations using algebra tiles
- J.2 Write and solve equations that represent diagrams
- J.3 Solve one-step linear equations
- J.4 Solve two-step linear equations
- J.5 Solve advanced linear equations

Factoring

- AA.1 GCF of monomials
- AA.2 Factor out a monomial
- AA.3 Factor quadratics using algebra tiles
- AA.4 Factor quadratics with leading coefficient 1

CPHS IXL Summer Assignments 2019:

AA.5 Factor quadratics with other leading coefficients

AA.6 Factor quadratics: special cases

AA.7 Factor by grouping

Quadratic equations

BB.5 Graph quadratic functions in vertex form

Radical expressions

EE.1 Simplify radical expressions

EE.2 Simplify radical expressions with variables

EE.4 Multiply radical expressions

EE.5 Add and subtract radical expressions

Parabolas

T.1 Identify the direction a parabola opens

T.2 Find the vertex of a parabola

T.4 Find the axis of symmetry of a parabola

T.5 Write equations of parabolas in vertex form from graphs

T.9 Graph parabolas

Pre-Calculus:

Review Packet from your Instructor

AP Calculus AB

Review Packet from your instructor.