

Geometry

Summer IXL Extra Credit Opportunity:

Hello Wonderful Geometry students,

I hope you are having a great start to summer! You will have a special opportunity to get earn extra credit over the summer. **This summer work will allow you to earn up to 6 2023/24 homework passes!**

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 I am 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 Geometry students should review over the summer. Each student should complete as many of the 60 sections below to **a score of 75** by working 15-20 minutes per day over summer vacation. This will keep your mind mathematically engaged through the summer and will enable you to start the new year "running!" Geometry requires that you have a mastery of Algebra skills and basic 'shape' awareness 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 should not be too difficult. The time you spend each day will keep you primed and ready to tackle next year's adventure in mathematics!

Please login to IXL with your username and password to confirm that it still works as soon as possible. If you are having trouble with your username and/or password, let me know by July 7th.

In addition, it would be very helpful for all Geometry students to purchase the book over the summer so you can bring your book and be prepared on the first week of school. The book on Amazon (used) is more reasonable now typically than at the start of the school year when so many students are trying to buy it. Here is what you need:

Geometry Common Core, Pearson 2015; ISBN #: 978-0-13-328115-6

Have a wonderful summer! I am available to answer questions through the summer except between June 23 – 30. Please email me sbundy@cvcs.org

Mrs. Bundy

Here are the sections of IXL under the Geometry heading for your review. If you complete all 64 sections **from the sections list below** to 75, then you will earn 6 homework passes. **Whatever number (rounded to the nearest 10) of the 60 options you complete to a 75 will determine how many homework passes you will earn.** For example if you complete 54 sections you will earn 5 passes, if you complete 55 it will round up to 6 passes.

Log on to the website: www.ixl.com/signin/cvcs. Input 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 "Geometry". If you have misplaced your IXL username and/or password, please email me. Once you click on Geometry, you will see all sections available to complete. **Choose only the section titles I have listed below to earn the extra credit!** *Please note that section numbers may change with a new IXL update, focus on the topic titles not the letters/numbers.* Any other sections will not earn extra credit but may be helpful to you if you want to dig deeper. I will be able to see your progress throughout the summer. This is summer work and must be completed between June 6th and the first day of school in order to receive the extra credit.

IXL Topics under Geometry:

Algebra review

- A: 1 (Ratios and proportions)
- A: 2 (Scale drawings: word problems)
- A: 3 (Number sequences)
- A: 4 (Shape patterns)
- A: 5 (Properties of exponents)
- A: 6 (Simplify radical expressions)
- A: 7 (Write variable expressions)
- A: 8 (Solve linear equations)
- A: 9 (Solve linear inequalities)
- A: 10 (Solve systems of linear equations)
- A: 11 (Solve a quadratic equation by factoring)
- A: 12 (Scale a quadratic equation by using the quadratic formula)

Points, lines, line segments, and planes

- B: 1 (Lines, line segments, and rays)
- B: 2 (Properties of planes, lines, and points)
- B: 3 (Describe intersections in a plane)
- B: 4 (Lengths of segments on number lines)
- B: 5 (Additive property of length)
- B: 6 (Midpoints)
- B: 10 (Midpoint formula: find the midpoint)
- B: 13 (Distance formula)

Angles

- C: 1 (Angle vocabulary)
- C: 2 (Angle measures)

Lines in the coordinate plane

- E: 1 (Coordinate plane review)
- E: 2 (Slopes of lines)
- E: 3 (Graph a linear equation)
- E: 4 (Equations of lines)
- E: 5 (Slopes of parallel and perpendicular lines)
- E: 6 (Equations of parallel and perpendicular lines)

Two-dimensional figures

- G: 1 (Polygon vocabulary)

Three-dimensional figures

- H: 1 (Parts of three-dimensional figures)
- H: 2 (Three-dimensional figure vocabulary)
- H: 3 (Nets and drawings of three-dimensional figures)
- H: 4 (Cross sections of three-dimensional figures)

Transformations

- L: 1** (Classify congruence transformations)
- L: 2** (Translations: graph the image)
- L: 3** (Translations: find the coordinates)
- L: 5** (Reflections: graph the image)
- L: 6** (Reflections: find the coordinates)
- L: 8** (Rotations: graph the image)
- L: 9** (Rotations: find the coordinates)
- L: 15** (Dilations: graph the image)
- L: 16** (Dilations: find the coordinates)

Quadrilaterals

- N: 1** (Identify trapezoids)
- N: 2** (Classify quadrilaterals I)
- N: 3** (Classify quadrilaterals II)

Pythagorean theorem

- Q: 1** (Pythagorean theorem)
- Q: 2** (Prove the Pythagorean theorem)
- Q: 3** (Converse of the Pythagorean theorem)

Area and perimeter

- S: 1** (Perimeter)
- S: 2** (Area of rectangles and squares)
- S: 3** (Area of parallelograms and triangles)
- S: 8** (Area and circumference of circles)

Circles and parabolas in the coordinate plane

- V: 1** (Find the center of a circle)
- V: 3** (Find the radius or diameter of a circle)

Measurement

- W: 1** (Convert rates and measurements: customary units)
- W: 3** (Convert square and cubic units of length)
- W: 4** (Precision)

Probability

- X: 1** (Theoretical and experimental probability)
- X: 2** (Outcomes of compound events)
- X: 3** (Identify independent and dependent events)
- X: 4** (Probability of independent and dependent events)
- X: 5** (Counting principle)
- X: 6** (Permutations)
- X: 14** (Geometric probability)