## Roger Bacon High School Summer Assignment

Mathematics - Assignment to be completed in the summer prior to freshmen year

Instructions: After logging in to your IXL account (https://www.ixl.com/signin/rogerbahs), please complete the IXL skills that correspond to the listed objectives for the class that you will be taking during the 2023-2024 school year. The easiest way to begin working on each skill is to click the skill \# below which includes an embedded hyperlink that will send you directly to the questions on IXL. BUT PLEASE REMEMBER, YOU MUST LOG INTO YOUR IXL ACCOUNT FIRST IN ORDER TO MAKE SURE THAT YOUR PROGRESS GETS RECORDED!!!
Please note, if you are taking Algebra I, Part I, you must earn a smart score of 70 or higher to receive credit. CP Algebra I and CP Geometry students must earn a smart score of 85 or higher and Honors Algebra I and Honors Geometry students must earn a perfect 100 on each skill. If you have any trouble logging in or have any additional questions, please email Coach Neal at bneal@rogerbacon.org.

## Algebra I AND Algebra I, Part I

| Objective | IXL Skill |
| :--- | :--- |
| I can write a repeating decimal as a fraction. | SKILL 1 |
| I can multiply numbers written in scientific notation. | SKILL 2 |
| I can use the pythagorean theorem to find the missing leg or hypotenuse length <br> in a triangle. | $\underline{\text { SKILL } 3}$ |
| I can estimate positive and negative square roots. | SKILL 4 |
| I can identify rational and irrational numbers. | SKILL 5 |
| I can solve equations. | SKILL 6 |
| I can solve proportions. | $\underline{\text { SKILL } 7}$ |
| I can find outliers in scatter plots. | SKILL 9 |
| I can graph a line from an equation in slope-intercept form. | $\underline{\text { SKILL } 10}$ |
| I can solve equations using square roots. | SKILL 11 |
| I can compare linear functions: graphs and equations. | SKILL 12 |
| I can find the distance between two points. | SKILL 13 |
| I can solve a system of equations by graphing: word problems. | SKILL 14 |
| I can make predictions with scatter plots. | SKILL 16 |
| I can represent numbers in prime factorization. | SKILL 17 |
| I can find the greatest common factor. | SKILL 18 |
| I can add and subtract integers. | SKILL 19 |
| I can multiply and divide integers. |  |
| I can evaluate numerical expressions involving integers. |  |

Geometry

| Objective | IXL Skill |
| :--- | :--- |
| I can describe a sequence of transformations. | SKILL 1 |
| I can write congruence statements using corresponding parts. | SKILL 2 |
| I can find the scale factor of dilations. | SKILL 3 |
| I can find the area and circumferences of circles. | SKILL 4 |
| I can factor polynomials. | SKILL 5 |
| I can solve quadratic equations using square roots. | SKILL 6 |
| I can solve a quadratic equation using the Quadratic Formula. | SKILL 7 |
| I can simplify radical expressions. | SKILL 8 |
| I can use the Pythagorean Theorem to find missing side lengths of a right triangle. | SKILL 9 |
| I can find the distance between two points. | SKILL 10 |
| I can solve a right triangle. | SKILL 11 |
| I can solve linear equations. | SKILL 12 |
| I can graph solutions to advanced linear inequalities. | SKILL 13 |
| I can calculate experimental and theoretical probability. | SKILL 14 |
| I can write linear functions from word problems. 15 |  |
| I can write an equation from a graph in point-slope form. | SKILL 16 |
| I can solve a system of equations by graphing. | SKILL 17 |
| I can identify equivalent expressions involving exponents. | SKILL 18 |
| I can add and subtract polynomials. | SKILL 19 |
| I can multiply two binomials. | SKILL 20 |

