Student: Joshua Huang

Math Teacher: Krista Maxfield

Algebra Standards

Semester 1: Progress Report 2023-2024

Skill		Novice	Approaching	Mastery	Exemplary	Not Assessed
N-RN - Number and Quantity - The Real Number System Extend the properties of exponents to rational exponents. Use properties of rational and irrational numbers.	S1					X
	S2					
N-Q - Number and Quantity – Quantities Reason quantitatively and use units to solve problems.	S1					X
	S2					
A-SSE – Algebra - Seeing Structure in Expressions Interpret the structure of expressions. Write expressions in equivalent forms to solve problems.	S1			X		
	S2					
A-APR – Algebra - Arithmetic with Polynomials and Rational Expressions Perform arithmetic operations on polynomials.	S1			X		
	S2					
A-CED – Algebra - Creating Equations Create equations that describe numbers or relationships.	S1			X		
	S2					
A-REI – Algebra - Reasoning with Equations and Inequalities Understand solving equations as a process of reasoning and explain the reasoning. Solve equations and inequalities in one variable. Solve systems of equations. Represent and solve equations and inequalities graphically.	S1			X		
	S2					
F-IF – Functions - Interpreting Functions Understand the concept of a function and use function notation. Interpret functions that arise in applications in terms of the context. Analyze functions using different representations.	S1			X		
	S2					
F-BF – Functions - Building Functions Build a function that models a relationship between two quantities. Build new functions from existing functions.	S1			X		
	S2					
F-LE – Functions - Linear and Exponential Models Construct and compare linear and exponential models and solve problems. Interpret expressions for functions in terms of the situation they model.	S1			X		
	S2					
S-ID – Statistics and Probability - Interpreting Categorical and Quantitative Data Summarize, represent, and interpret data on a single count or measurement variable, as well as on two categorical and quantitative variables. Interpret linear models.	S1					X
	S2					
Homework/Classwork - A compilation of effort and performance on homework and classwork throughout the semester.	S1			X		
	S2					

Rubric scores given on semester one standards are based on the concepts introduced in the first semester and not necessarily on mastery of the entire standard.

*Highest mark for standards is Mastery

Student Name: Joshua Huang
Student Reflection:
It's been a full semester already in my final year of middle school. I am proud of how I managed to keep up with two classes simultaneously because of my study habits. I have learned quite a lot of math over the last few years and have built a solid foundation of Algebra concepts and am adequately able to apply the knowledge on tests. Because I am a half a year until I go off to high school, I have further developed my math and study skills.

I am most proud of how much I have grown since from my last two years of middle school. In the past, I would wait until the very last minute to do homework, now I am able to finished homework on time and study enough so that I feel prepared for a test. Because of my study habitsI am able to do well taking two math classes simultaneously. I am now able to study even though I don't want to when before that was something I struggled with. I am also proud of the amount of math I learned over the semester and last few years. In the beginning of middle school, I've studied enough math over the summer to go into the accelerated pace math. And now, I am on track to finish calculus in high school.

I am very proud of myself of the amount of growth as a student that I have shown. As I have only a half year left until high school, I will continue to work hard and further develop good study habits so I can succeed in high school where I will have more homework and classes get harder.

Teacher Comments:
I am so happy to be teaching the Algebra class this year. We had a great first semester. These students are amazing. They come to class every day ready to learn and eager to participate. They are getting their homework done and turned in and are doing well overall on the assessments. I have high expectations of them. This is a high school level course, and I expect a high school level of work from them. They are living up to my expectations, and they should be proud of their efforts. I have fun every day I am with them, and I hope that they are also enjoying the math class.

This semester we have been exploring functions and linear relationships. We investigated slope and what it can tell us about a graph. We learned how to simplify expressions with exponents, including negative and fractional exponents. We spent some time solving absolute value equations. We have learned how to multiply binomials and several different methods to solve systems of equations. We investigated sequences and compared them to functions. One of our most challenging topics was how to model two-variable data with lines of best fit, and how to improve those lines of best fit. This has involved a lot of work using Desmos – ask your student. We finished up this semester studying exponential growth and decay. Next semester we will spend a lot of time with functions, including exponential, quadratic, and inequalities.

We have been taking regular chapter exams for assessments. I then correlate the problems to Algebra standards and report their progress on the Algebra standards on the semester-end report card. Rubric scores given on semester one standards are based on the concepts introduced in the first semester and not necessarily on mastery of the entire standard. Even though we have covered a great deal of the curriculum, most of these Algebra standards continue to be developed in the final chapters, and many of them have yet to be covered. A student's understanding should develop over time, so even if they are not yet demonstrating mastery of a standard, they will be reviewing and building on that standard next semester. The goal is to demonstrate mastery of the standards by the end of the course, and we will be working on that goal all next semester. Note that the maximum rubric score they can achieve on any standard is Mastery. The rubric for Homework/Classwork ranges from Novice to Exemplary and is based on performance on the Homework/Classwork quizzes and the number of assignments completed and turned in on time.

Joshua, you have been doing an excellent job in Algebra 1 this year and you should be proud of yourself. You have demonstrated a solid understanding of the concepts and strategies that we have covered, I appreciate how you participate in class and share your thoughtful ideas and strategies in class. You have shown mastery of all the standards and have done very well in completing your homework this semester, which means you are putting forth productive effort into learning the course content. I am pleased to hear that you recognize the importance of good study habits. I am confident you will do very well in IM3-STEM, and it will require dedication and continuing those good study habits. You are excellent at self-advocating by asking questions when you are unsure, and I hope this quality will continue in high school and beyond. Don't ever be afraid to ask questions, that is how we learn! You have done a great job this year. Keep up the excellent work in the second semester.

By Math Teacher – Krista Maxfield

Student: Joshua Huang **Math Teacher: Krista Maxfield**

Geometry/Statistics Standards **Semester 1 Progress Report 2023-2024**

Skill		Novice	Approaching	Mastery	Exemplary	Not Assessed
G-CO - Congruence Experiment with transformations in the plane. Understand congruence in terms of rigid motions. Prove geometric theorems. Make geometric constructions.	S1			X		
	S2					
G-SRT – Similarity, Right Triangles, and Trigonometry Understand similarity in terms of similarity transformations. Prove theorems involving similarity. Define trigonometric ratios and solve problems involving right triangles. Apply trigonometry to general triangles.	S1			X		
	S2					
G-C – Circles Understand and apply theorems about circles. Find arc lengths and areas of sectors of circles.	S1					X
	S2					
G-GPE – Expressing Geometric Properties with Equations Translate between the geometric description and the equation for a conic section. Use coordinates to prove simple geometric theorems algebraically.	S1			X		
	S2					
G-GMD – Geometric Measurement and Dimension Explain volume formulas and use them to solve problems. Visualize relationships between two-dimensional and three dimensional objects.	S1					X
	S2					
G-MG – Modeling with Geometry Apply geometric concepts in modeling situations	S1					X
	S2					
S-CP – Conditional Probability and the Rules of Probability Understand independence and conditional probability and use them to interpret data. Use the rules of probability to compute probabilities of compound events in a uniform probability model.	S1			X		
	S2					
S-MD – Using Probability to Make Decisions Use probability to evaluate outcomes of decisions.	S1			X		
	S2					
Homework/Classwork A compilation of effort and performance on homework and classwork throughout the semester.	S1			X		
	S2					

Rubric scores given on semester one standards are based on the concepts introduced in the first semester and not necessarily on mastery of the entire standard.

*Highest mark for standards is Mastery

Student Name: Joshua Huang
Student Reflection:
It's been a full semester of my final year as a middle school student. I have chosen to do geometry because I like math and I can be a step closer to achieving my goal of finishing calculus in high school. Despite it being a 10th grade course, I am able to have a solid foundation of geometry concepts and are able to apply this knowledge on test. Although, I doubted myself in the beginning, I am able to do well in doing Geometry and Algebra at the same time.

I am most proud of this semester is the amount of growth as a student over the last two years. I am able to finish all my homework on time and get all mastery on my standards. In the past, I would rush during test time as well as procrastinate while doing homework. Before, I would not study just because I didn't want to, now, I make a point to do it even though I don't want to. As a result, I tend to do better more often. I am also proud of how far I came in my math knowledge. Before middle school, I was barely in grade level math, now I am two years ahead in math. I am able to get high test scores and even if I don't, I am able to bounce back from it. My favorite part about geometry is that it is visual. Since I am a visual learner, I find learning geometry easier and more enjoyable. I especially enjoyed the first day of geometry when we made mobius strips.

Overall, I am proud of my growth over the last few years and I really enjoy doing geometry because it is visual type of math. As I approach high school, I will continue to work hard and keep up good study habits because high school will be more challenging and have a lot more homework. High school and beyond won't be easy, but with determination, I will succeed.

Teacher Comments:
I am so happy to be teaching the Geometry math class this year. We had a great first semester. These students are amazing. The students have chosen to take Geometry concurrently with Algebra. Taking two high school level math classes on top of their homeroom curriculum is quite a challenge. I hope the students are also enjoying this Geometry class. They come to class every day full of questions and an eagerness to learn. They do the classwork, work together, get their homework done and turned in, and overall are doing well on the exams. I have high expectations of them. This is a high school level course, and I expect a high school level of work from them. They are living up to my expectations.

We have already covered a great deal of the curriculum. We have finished six of the twelve chapters this first semester. We have studied basic geometric shapes and transformations, angle relationships, similar and congruent figures, slopes, right triangles, and probability. We learned about right triangle trigonometry, including sine, cosine, and tangent functions, and non-right triangle trigonometry, including the Law of Sines and the Law of Cosines. We studied special triangles such as 30-60-90, 45-45-90, and Pythagorean triples. We began to look at coordinate Geometry. We also began to build the skill of constructing proofs to make conclusions about geometric shapes. Geometry is the first course where students learn how to construct a proof, and we have been doing a great deal of them.

We have been taking regular chapter exams for assessments. I then correlate the problems to Geometry standards and report their progress on the Geometry standards on the semester-end report card. Rubric scores given on semester one standards are based on the concepts introduced in the first semester and not necessarily on mastery of the entire standard. Even though we have covered a great deal of the curriculum, most of these Geometry standards continue to be developed in the final six chapters, and many of them have yet to be covered. A student's understanding should develop over time, so even if they are not yet demonstrating mastery of a standard, they will be reviewing and building on that standard next semester. The goal is to demonstrate mastery of the standards by the end of the course, and we will be working on that goal all next semester. Note that the maximum rubric score they can achieve on any standard is Mastery. The rubric for Homework/Classwork ranges from Novice to Exemplary and is based on performance on the Homework/Classwork quizzes and the number of assignments completed and turned in on time.

Joshua, I want you to know that you have been doing an outstanding job in your Geometry class this semester. The fact that you are concurrently taking Algebra 1 shows your strong abilities and commitment to mathematics. You have shown mastery of all the standards and should be very proud of yourself. I am thrilled to see that you are developing good study habits, which will be very helpful for you in high school and college. I appreciate how you are always willing to share your strategies and ideas with the class, and it is very clear that you have a deep understanding of Geometry and its applications. I have no doubt that you can achieve anything that you set your mind to. I am looking forward to a successful and enlightening second semester!

By Math Teacher – Krista Maxfield