

# December



## 8<sup>th</sup> Grade Math & Algebra

### What We Are Learning

**8th Grade** - Students are currently learning about statistics and data. We are using scatterplots to create visual representations of real-world information, make predictions based on trends we observe, and analyze the relationships within the data. Through this work, students are learning how to interpret patterns, identify correlations, and draw meaningful conclusions from the information provided.

**Algebra** - students are currently learning about systems of linear equations and linear inequalities. They are practicing solving these systems both by graphing and algebraically, allowing them to see how solutions can be represented visually and symbolically. Through this unit, students are building strong problem-solving skills and deepening their understanding of how multiple equations can work together to describe relationships between variables.

### Words To Know

#### 8th Grade -

**Data** - Information collected about people or things.  
**Scatterplot** - A graph that shows points representing two pieces of related data.  
**Trend** - A pattern in the data, such as going upward or downward.  
**Correlation** - A relationship between two sets of data (positive, negative, or none).  
**Prediction** - Using existing data to make a reasonable guess about what might happen next.

#### Algebra -

**System of Equations** - Two or more equations that are considered at the same time.  
**Solution to a System** - A point  $(x, y)$  that makes all equations in the system true.  
**Linear Inequality** - An inequality that creates a region on the graph instead of just a line.  
**Intersection Point** - The point where two lines cross, representing the solution to a system.  
**Substitution/Elimination** - Two algebraic methods used to solve systems without graphing.

### Talk About Learning

**8<sup>th</sup> Grade** - Create a Family Scatterplot!

Choose two pieces of data to compare. Some fun ideas: Hours of sleep vs. how energetic each family member feels the next day. Number of minutes spent reading vs. number of pages read. Outdoor temperature vs. how long the family stays outside. Record your data points together. Plot them on a simple graph (paper works great!). Ask: Do we see a trend? Is there a relationship? What prediction could we make based on our points?

**Algebra** - Create simple systems of equations from everyday situations, such as comparing prices at two different stores. Tracking the cost of items vs. total money spent. Speed vs. time for car trips or walks. Ask your student to set up a system of equations and solve it.

### Important Reminders

**Algebra** - The semester exam is independent of the Quarter grade. Because this course awards high school credit, the semester exam will be entered into its own grading column and then averaged together with the Quarter 1 and Quarter 2 grades to determine the overall semester grade.

No corrections are available for this exam, and students have been informed of this. However, they will receive ample review materials to help them feel prepared and confident as they study.

If you have any questions about the exam structure or grading, please feel free to reach out.

### Upcoming Events

December 16-18 - Semester Exams

