December

7th Grade & 7th Honors Math

What We Are Learning

7th Grade - We are learning probability from simple, compound, independent, dependent, theoretical, and experimental events. After that, we will be reviewing everything that we have learned this semester to prepare for the final exam.

7th Honors - We are wrapping up our unit on transformations on the coordinate plane. Students have been exploring how shapes move or change while preserving key properties. Our focus has included:

Translations – sliding a figure up, down, left, or right without turning or flipping it.

Rotations – turning a figure around a fixed point, often the origin, by 90°, 180°, or 270°.

Reflections – flipping a figure over a line of reflection, such as the x-axis, y-axis, or another vertical/horizontal line.

Dilations – enlarging or shrinking a figure from a center point using a scale factor.

Students have been practicing how to apply these transformations, graph resulting images, and describe them using precise mathematical vocabulary.

What's Next: Real Number System

We are now beginning our next unit on the Real Number System, where students will learn how rational and irrational numbers fit together within this system. We'll explore:

The differences between integers, fractions, terminating/ repeating decimals, and irrational numbers

How square roots connect to perfect squares

How to estimate square roots when they are not perfect squares by using number sense and the location of nearby perfect squares on the number line.

Upcoming Events
12/5: Transformation Test (Honors)
12/ 10: Probability Quiz
December 16-18: Final Exam

Talk About Learning

7th Grade - Probability is used all around our everyday lives. Chat about where you use probability in your everyday life. Here are a few examples.

Watch the local news. How does the meteorologist use probability in their weather forecasts? How does probability affect your daily plans and wardrobe? What are some different examples of probability mentioned during the weather forecast?

Play rock-paper-scissors with a friend. Given the rules—rock breaks scissors, paper covers rock, and scissors cut paper—what are your chances of winning? Create a sample space listing all of the possible results when playing with your friend. How many possible outcomes are there? What are the chances of the game resulting in

7th Grade Honors - Graph Paper Transformations:
Give students a coordinate grid and choose a simple shape (triangle or quadrilateral). Ask them to perform a translation, reflection, rotation, or dilation and label the coordinates before and after.

For Real Numbers & Square Roots:
Square-Root Number Line: Choose a non-perfect square (like 45 or 20). Ask your student to estimate where $\sqrt{45}$ or $\sqrt{20}$ would fall between two perfect squares.

Perfect Square Memory Boost: Practice recalling perfect squares up to 20^2—this makes estimating much quicker.

Real-World Irrationals: Notice numbers like $\sqrt{2}$, π, or $\sqrt{5}$ in measurements, design, and technology to reinforce the idea of irrational numbers.

Important Reminders

Kids need to have a PENCIL everyday with them.

If your child needs extra guidance with math, check out the 5 Minute Math videos - good for children and parents!