

7th Grade Advanced Math

Class Expectations:

- ✓ Come to class prepared and ready to learn.
- ✓ Complete assignments on time.
- ✓ Show your work.
- ✓ Follow all classroom and school rules.
- ✓ If you need help, ask.
- ✓ If you miss class, it is your responsibility to get your missing work.

Grading Policy:

Daily Work/Quizzes – 50%

Late Policy: If an assignment is not turned in when it is due, 10 points will be deducted for each day it is late.

Tests – 50%

Any student scoring below a 70 on a test is allowed to make corrections. Corrections will be done during morning tutorials or activity period. Students have 5 school days after the test is returned to complete corrections and schedule a retest.

Class Supplies:

- ✓ Folder with brads
- ✓ Composition book
- ✓ Pencils
- ✓ Expo markers (for student use)
- ✓ Markers/colored pencils

Discipline Policy:

- ✓ First Offense – Verbal Warning
- ✓ Second Offense – Contact parent/guardian and morning detention with Mrs. Patek
- ✓ Third Offense – Office Referral

Junior High classes are 45 minutes and move at a fast pace. The pace for the advanced math class will be accelerated to ensure that all required concepts are covered to prepare your student for the 8th grade STAAR test. Please be prepared to work on assignments outside of the classroom. If you need help, please come see me during morning tutorials or activity period. Videos for each lesson will be uploaded in Google Classroom, so you can utilize them on days you are absent or when you want to review a lesson we covered in class.

Mrs. Jennifer Patek

patekj@shinerisd.net

361-594-3131 x 812

Conference: 2:39 p.m. – 3:25 p.m.

Tutorials: 7:20 a.m.



The following math concepts will be covered throughout the school year:

- **Numbers and Operations:** Students will add, subtract, multiply, and divide rational numbers fluently in mathematical and real-world situations.
- **Real Number System:** Students will evaluate and estimate square roots, classify real numbers, compare real numbers, and convert between scientific and standard notation.
- **Equations and Inequalities:** Students will model and solve equations with variables on both sides of the equal sign. Students will also write and solve equations and inequalities that use rational coefficients and constants.
- **Linear Relationships:** Students will identify functions, find slope and rate of change, write equations in slope-intercept form, represent proportional and non-proportional linear relationships, and solve problems involving direct variation.
- **Angles and Triangles:** Students will establish and use facts about angle relationships to solve problems. Angle relationships in this unit will include angles formed by parallel lines and transversals, interior angles of triangles, exterior angles of triangles, and angles in similar triangles. Students will use the Pythagorean theorem and its converse to solve real-world and mathematical problems.
- **Transformations:** Students will generalize the properties of transformations as well as algebraically represent transformations on the coordinate plane including translations, reflections, rotations about the origin, and dilations. Students will also identify scale factor and explain its effect on the perimeter and area of two-dimensional shapes.
- **Area and Surface Area:** Students will find the circumference and area of a circle as well as the area of composite figures. Students will use nets to find the lateral and total surface area of prisms and pyramids. Additionally, students will calculate lateral and total surface area of prisms and cylinders using formulas.
- **Volume:** Students will use formulas to solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, triangular pyramids, cylinders, cones, and spheres.
- **Scatter Plots and Data:** Students will construct and interpret scatter plots, make predictions using the trend lines of scatter plots, find mean absolute deviation, and generate random samples.
- **Financial Literacy:** Students will calculate and compare simple and compound interest, loan repayments, and different methods of payment. Students will also determine if decisions are financially responsible and estimate the cost of college.
- **Percents:** Students will apply concepts of percents as they compare monetary incentives and solve problems involving percent increase or decrease. Additionally, students will calculate the percentage of different categories within a total budget and determine a minimum household budget.
- **Probability:** Students will make predictions and comparisons for both simple and compound events, including experimental and theoretical probabilities. Students will also represent sample space and determine the probability of a simple event and its complement.

I am looking forward to a successful year. If you have any questions, please do not hesitate to contact me via phone or email. I would be happy to meet with you during my conference time to discuss any concerns you may have.

Sincerely,

Mrs. Jennifer Patek