SAIL Math Frameworks

By the end of grade 9, SAIL students should be able to:

- Develop fluency between multiple representations: symbolic, numeric and graphical.
- Identify, describe and analyze patterns and transformations in number, shapes and data.
- Solve, graph, and analyze linear/non-linear equations using tables, graphs, and written rules, emphasizing quadratic equations and exponential models.
- Collect, organize, and analyze data using surveys, tables, and graphs in order to make predictions or conjectures.
- Use counting techniques, experimental and theoretical probability to represent and solve problems.
- Use concepts of ratios, proportions, and similarity in mathematical and real-world problems, including the application of the Pythagorean Theorem and special angles.
- Derive and use methods to measure area, perimeter, and volume of regular and irregular figures.
- Use systems of measurement to solve real-world problems.
- Apply the appropriate computational techniques to solve a variety of problems and determine the reasonableness of the results.
- Generate and solve problems of appropriate complexity created from real-world problems and communicate the reasoning behind the solution.