## Parent Guide to

## Student Success

Rutherford County Schools is committed to providing high quality instruction anchored in the Tennessee State Standards using state adopted and board approved curriculum resources.

## What to Expect in Integrated Mathematics I and II

In Integrated Math I, students solidify their understanding of linear functions and use it to solve linear equations in real-world contexts. A big leap in Integrated Math I is the introduction of exponential functions. Students also compare data displays and determine triangle congruence with more formal language and techniques. In Integrated Math II, students are introduced to quadratic functions and work heavily with graphing, rewriting, and solving quadratics. Students also expand their understanding of exponents to include exponents that are fractions. Integrated Math II expands on properties of similar geometric figures and probability concepts to include compound probability.

## A Sample of What Your Child Will Be Working On

## Integrated I

- Determining if a relationship is a function and identifying the domain and range.
- Interpreting linear functions in real-world contexts.
- Solving systems of equations and inequalities.
- Creating linear or exponential functions to represent data.
- Showing that two geometric figures are congruent using transformations or properties of congruence.
- Comparing quantitative data by analyzing the shape, center, and spread of data.


## Integrated II

- Adding, subtracting, and multiplying polynomials.
- Solving and factoring quadratic equations.
- Graphing quadratic functions and identifying key characteristics.
- Rewriting expressions involving square roots and exponents.
- Showing that two geometric figures are similar using transformations or properties of congruence.
- Solve triangles using trigonometry.
- Calculate conditional probability (e.g., probability of selecting an ace, given it is a red card).


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## Conversation Starters

## With Students

- Tell me how you solved a problem in math class today. What strategies or models did you use?
- Productive struggle is an important part of learning math. What can you do when you encounter a challenge in math class?
- What goals do you have for your math class? How can I help?
- What is your favorite thing about math class? Why?


## With Teachers

- Is my child meeting the expectations of this class? How can I keep track of their progress?
- What can we do at home to support what you are doing in class?


## (i) Calculators

Desmos is a free calculator website/app that can be used daily in class, on the digital ACT/SAT, and on the state end-of-course exam. Any device can access it, and the app doesn't require internet access.

If purchasing a handheld calculator, purchasing one early in high school is a great idea because it can be used throughout high school. Talk with your teacher about which calculator would be best.

## Resources:

