

# Transitions to College Math:

R. Seals ([seals\\_r@betheltate.org](mailto:seals_r@betheltate.org) or 734-2271 ext. 7037)

**Course Description:** Transitions to College Math is a 4<sup>th</sup> year math course designed to prepare students for college math. Concepts introduced in Algebra II will be explored in greater depth. Matrices and functions are also studied in great detail.

Topics in Transitions to College Math A include:

1. Systems of Linear Equations
2. Solving Systems using Matrices
3. Operations on Matrices
4. Properties of Functions & Their Graphs

Topics in Transitions to College Math B include:

1. Graphing Functions using Transformations
2. Solving Quadratic Equations
3. Graphing Quadratic Functions
4. Conic Sections & Their Graphs
5. Exponential & Logarithmic Functions

**Text:** *Algebra and Trigonometry* by Brown and Dolciani and *Advanced Mathematics* by Brown

**Supplies/Materials Required:** Scientific calculator, notebook (3-ring binder is suggested), pencil, colored pencils, 6 pack of colored dry erase markers, graph paper and paper

**Required Class Projects:** Students will be using the school-provided TI-Nspire graphing calculators for short presentations to assist the development of concepts. Students will also complete a roller coaster project designed to help students implement some of the above-mentioned topics.

**Classroom Procedures:** Homework is assigned at least 4 times a week. This means that your student will usually have material that will need to be completed out of class. Homework is checked every time that it is assigned. Homework assignments are worth 5 points each. Homework is assessed on a “good faith effort” basis. That means I will check it for completion, notation, necessary steps and accuracy, even though the final answer may not be correct. As long as the homework is attempted and completed with “good faith effort,” the student will receive 5 points. Homework is to be set out on the desk when the student enters the classroom. It will be checked while the students complete warm-up problems at the board. If the homework is not laid out at the beginning of class and the student must be reminded, one point will be deducted from the grade after the second reminder. If it is forgotten more than twice, the student will receive a zero for the assignment. Homework is viewed as practice and because of this is not accepted late. Fieldtrips and gifted classes are not an absence from school so homework should be turned in the day it is due. In addition, class notes and examples will be posted on my website [www.math4tigers.org](http://www.math4tigers.org) on a daily basis. These notes should not replace those that the student is expected to take in class, but should supplement them. If the student misses class because of an excused absence, work assigned prior to the absence is due on the day the student returns to school. The student can use my website to get any missed notes and have make-up work ready the day after the return to school as stated in the student handbook. Every homework assignment will be returned to the student so that s/he may use it to prepare for each test or quiz. All tests and quizzes will be returned to the students so that they may be able to see their progress, but the test or quiz will be kept in my room. Students are welcome and encouraged to come in during homeroom or after school to go over them in more detail, but they must remain in my room unless prior arrangements have been made. Students needing extra help may attend the scheduled help sessions during homeroom or after school or may see me after school upon request.

**Evaluation Procedures:** The board adopted grading scales will be used to calculate grades. Grades are based on the total points earned divided by the total points possible. Homework assignments are worth 5 points, quizzes are worth 15-25 points, tests are worth 40-60 points, and roller coaster project is worth approximately 50-75 points. All coursework is 80% of the semester grade with the final exam worth 20% of the semester grade. All work is to be completed in pencil – NO exceptions. Absence must be EXCUSED to receive credit for work not turned in on the due date. Or it can be emailed to me on its due date and time-stamped prior to the end of your assigned class period.