

8th Grade Math II Course Syllabus
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Maria Montessori Academy
2014-2015

Welcome to the start of a new school year! This year, students will be studying and using many different resources to master 8th grade mathematics. We are following Common Core Standards. The curriculum will weave Montessori Materials, Math in Focus (Singapore Math - Math Book), and Khan Academy. Students will also have ample opportunities to participate in project based learning activities.

Course Description

8th grade is all about tackling the meat of algebra and getting exposure to some of the foundational concepts in geometry. If students get this stuff (and they should because they're incredibly persistent), then the rest of their math careers will be significantly easier. If they get the equations, functions and systems that we will cover, most of high school will feel intuitive for them. On top of that, we will sharpen many of the skills that they last saw in 6th and 7th grades. This includes extending our knowledge of exponents to negative exponents and exponent properties and our knowledge of the number system to irrational numbers! Get excited.

Supplies Needed

- Textbook: Students will be issued 2 books throughout the year provided by the school. The textbook agreement is attached and will need to be signed.
- 3 Ring Binder: 1-inch or 1.5-inch binder that will be used for math only. They are expected to keep their binder and math book clean, neat and organized. Both will travel to and from school everyday.
- Five notebook dividers
- Pencils: students are expected to do math homework in pencil only!
- Pens: all colors
- Post-it Tabs
- Graph paper
- Highlighters: all colors
- Protractor
- Metal Compass
- Ample supply of lined loose-leaf paper
- Calculator - 7th and 8th grade models are TI 30XS Multiview or Casio FX 300-ES (available at Office Depot, Office Max, Wal-Mart or Target for \$12-15).
- One Green Pronged folder
- 1 Package of page protectors

Grading Summery

Students will be allowed to demonstrate how well they are making sense of the mathematics in many ways. Below is a grading summary.

Participation (5 points weekly)

Because participating in discussions and activities is so important in helping the students make sense of the mathematics, this is one part of the students grade. They grade themselves at the end of each week on how well they participated throughout the week. On page 3 is a rubric for grading participation.

Interactive Math Journals (2 points each math journal entry)

It is very important to communicate mathematically in writing. Therefore, journals also figure into the grade. Journals are used for note taking, problem solving, communicating, understanding, and summarizing concepts learned. Journals will be collected periodically. On page 4 is a rubric for grading journals. **Students may use their math journals on all quizzes but not on tests.**

Homework (5 points possible)

Homework assignments offer students opportunity to think about problems more in depth. Students will have the opportunity to practice their skills on different topics through their text book an also on Khan academy. On math book assignments students will have the opportunity to revise their answers as we discuss problems. On page 3 is a rubric for grading homework.

Logic questions/puzzles (2 points)

Each week I will post 5 logic puzzles or questions on the blog. The students will need to complete 20 throughout each semester. It will need to be turned in the next day on a loose-leaf paper showing all work. Any extra questions/puzzles answered will be extra credit. I will post the answers to all 5 problems on the blog at the end of the week.

Vocabulary (1 point for each word listed and correctly defined)

Understanding mathematical terminology is necessary for developing mathematical mastery. Students will be give weekly vocabulary words to define and list. These words will appear on quizzes and tests.

Quizzes (Points vary)

Students will be given one to two quizzes per unit. Students are allowed to use their math journals on their quiz.

Tests (Points vary)

An individual test will be given at the end of each unit. This serves as an opportunity for students to show what they, as individuals, have learned from the whole unit. Points will be assigned based on the amount of work asked to solve each problem. Not all problems are awarded the same number of points.

Project/Activities (points vary)

Students may also be assigned an in class OR home project to complete. The project will be graded based on the amount of work asked for each project. All projects will be graded with a rubric.

Late Work

Late work will be accepted but it will receive half credit. If a student is absent, he/she has the same number of days that he/she was absent to make up any work. It is the student's responsibility to get the agenda and any missing work or see the teacher outside of class.

Grading Rubrics

Participation Grading Sheet

Name _____

Week of _____

Think about how well you participated in class this week. Answer the following questions, as they will help you give yourself a fair participation grade for this week.

- Did you participate in discussions?
- Did you come prepared to class, having done your homework, so that you could ask questions?
- Did you ask questions when you didn't understand?
- Did you listen to others?
- Did you use your class time wisely.

Give yourself a 5 if you answered yes to all of the questions. Hooray for you!

Give yourself a 4 if you answered yes to most of the questions.

Give yourself a 3 if you answered yes to few of the questions.

If you answered no to several of these, give yourself a 2 and rethink your role in this class or talk to Mrs. Angie.

I grade myself a _____ for this week. Signature _____

Homework Grading Procedures

5 All problems completed correctly

4 All problems completed; most work done correctly

3 Most problems attempted, some given wrong answers or incomplete

2 Only half done, most work wrong or incomplete

1 Incomplete and incorrect

0 No work

Interactive Math Journal Grading Sheet

- 5 Effectively communicates thoughts
 Uses appropriate vocabulary
 Uses a variety of strategies to solve problems
 Journal is well organized and the entries are labeled and dated
 Interactive foldables are neatly placed and colored

- 4 Effective in communicating your thoughts most of the time
 Uses appropriate vocabulary some of the time
 Uses some different strategies when solving problems
 Journal is fairly well organized and entries are labeled and dated
 Interactive foldables are neatly placed and colored most of the time

- 3 Attempt to communicate thoughts but entries are unclear at times
 Uses some appropriate vocabulary
 More strategies are needed in solving problems
 Journal needs to be organized with the entries labeled and dated
 Interactive foldables are present most of the time but are sloppily placed

- 2 Please see me

Math Notebook Guidelines

Math Notebook: Students will be required to have a separate 3-ring binder for math, 1 or 1.5-inches.

Before the post-it dividers, keep:

- a) Your notebook cover sheet, with your name and teacher's name. This can be in the cover (for view binders) or the first page inside the notebook.
- b) This course syllabus
- c) Your up-to-date work list (will be supplied by the teacher).

Use the dividers for these 5 sections, clearly labeled:

1) *Investigations*

In this section, students will keep all investigation problems, which are completed in class.

2) *Homework Assignments*

This section will include work on the ACE assignments. Homework should be written on lined loose- leaf notebook paper or graph paper and clearly labeled.

3) *Vocabulary*

In this section, students will create their own math dictionary of words used throughout each unit. Use lined loose-leaf paper for this section.

4) *Journal*

This section should contain any work that is done for in-class problems, any notes taken and responses to mathematical reflections Ms. Angie will provide many foldable and interactive learning lessons that need to be put in this section.

5) *Assessments*

This section will include all check-ups, quizzes, tests, projects, and self-assessments. Notebooks will be collected periodically at unannounced times. Students will be given a homework grade for keeping their notebook organized. After each unit is completed, students will clean all sections of their notebook except Section 3 and 4. These papers will be stapled together and filed in the classroom for further reference.

Please review the above with your child. By signing below, parent and student understand the expectations for Math II. Students should have their math notebook organized and ready to use by **Monday, August 25th**. Please put these papers at the front of the binder.

_____	_____
Parent/guardian	Student

Parent/guardian E-mail address _____

Thank you for sharing your student with me this year. I look forward to an awesome year of learning! If you have any questions or concerns at any time during the year, please feel free to contact me.

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