



Fundamentals of Math

Yearlong 2022-2023



ELIGIBLE STUDENTS:

Grade 7 and advanced grade 6: *This course is designed to help students complete the transition from elementary computation skills into deeper mathematical understanding and more advanced mathematical concepts. At the end of the year, students should be prepared to progress into Pre-Algebra and beyond. Students enrolling in the class should have a solid understanding of place value and the mathematical operations of whole numbers. Students should be familiar with fractions and decimals, various visual representations of data, and basic geometric concepts.*

Class Dates: classes begin Tuesday, September 6, 2022; classes end Friday, May 26, 2023

Class Section 1: Monday, Tuesday, Thursday 3:30-4:45pm(EST)

Instructor: Mrs. Joelle Riethmiller

E-mail: jriethmiller.scholeacademy@gmail.com

SCHEDULE FOR FUNDAMENTALS OF MATH

CLASS SESSION DATES:

Classes Section 1: Monday, Tuesday, Thursday 3:30-4:45pm(EST)

32 weeks and 95 classes on the following dates

September (11): 6, 8, 12, 13, 15, 19, 20, 22, 26, 27, 29

October (13): 3, 4, 6, 10, 11, 13, 17, 18, 20, 24, 25, 27 **(End Quarter 1)**, 31

November (10): 1, 3, 7, 8, 10, 14, 15, 17, **(Thanksgiving Break)**, 28, 29

December (7): 1, 5, 6, 8, 12, 13, 15, **(Christmas Break)**

January (11): **(Christmas Break cont.)** 9, 10, 12, 16, 17, 19 **(End Quarter 2)**, 23, 24, 26, 30, 31

February (9): 2, 6, 7, 9, 13, 14, 16, **(Winter Break)**, 27, 28

March (13): 2, 6, 7, 9, 13, 14, 16, 20, 21, 23 **(End Quarter 3)**, 27, 28, 30

April (9): **(Holy Week/Easter Break)** 10, 11, 13, 17, 18, 20, 24, 25, 27

May (12): 1, 2, 4, 8, 9, 11, 15, 16, 18, 22, 23, 25 **(End Quarter 4)**

OFFICE HOURS: In addition to scheduled class times, the instructor may designate an optional weekly session as needed. During “Office Hours” students may raise questions, seek assistance, or review class material.

**Please note the above dates and times are the anticipated class sessions for this course. However, all dates are subject to change as the instructor’s circumstances might dictate (e.g. illness, family emergency). Any classes canceled by the instructor will be made up at an alternate time designated by the instructor.*

FUNDAMENTALS OF MATH COURSE MAP:

Number System and Relationships - whole numbers, integers, decimals, fractions, and mixed numbers

Number Operations - add, subtract, multiply, divide, exponents

Ratio, Rates, and Percent

Expressions and Equations

Coordinate Plane

Geometry - area of polygons; circumference and area of circles; surface area and volume of solids

Statistics and Data

REQUIRED COURSE MATERIALS:

- Textbook REVEAL Math Course 2
[REVEAL Math Course 2](#)
- Three-ring Binder
- Loose-leaf Filler Notebook Paper
- Loose-leaf Filler Graph Paper
- 5 Divider Tabs
- Sharpened Pencils, Erasers, Highlighter, Basic Set Colored Pencils/Crayons
- Ruler with Customary and Metric Markings
- Protractor
- Drawing Compass
- Personal Size Dry-erase Board with Markers
- Additional materials and/or manipulatives may be requested prior to a particular class session

FUNDAMENTALS OF MATH COURSE DESCRIPTION:

As students transition from lower school into middle school, they will extend their foundational mathematics and computation skills to apply to higher levels of problem solving. They will begin to experience increasingly abstract mathematical concepts. They must gain a solid understanding of these concepts in order to be prepared for Pre-Algebra and Algebra.

This course will guide students through a variety of topics including:

- Positive and negative numbers
- Ratio and percent
- Algebraic expressions, equations, and inequalities
- Area and Volume of shapes and solid figures

One of the instructor's goals for a student enrolled in Fundamentals of Math is for the student to expand and deepen his love for learning. Many people have an aversion to mathematics for one reason or another. In this course, the instructor will strive to ignite and kindle the beauty and wonder of the patterns and orderliness of mathematics for the student as well as demonstrate its practicality to daily life. Another goal is to solidify the student's current understanding to gain confidence in problem solving. With acquired confidence, the student can build upon foundational skills in order to delve into higher levels of problem solving and critical thinking.

STUDENT EXPECTATIONS: EXECUTIVE FUNCTION SKILLS

Students enrolling in Fundamentals of Math will be expected to show development of Executive Function Skills throughout the year. Executive Function Skills speaks to a set of qualities and skill sets a student can develop and hone to better approach the courses, lectures, readings and teachers they will face in their future academic coursework and as a life-long learner.

1. Engagement: An engaged student views class sessions as opportunities to learn from and with his instructor and classmates. He is polite and attentive, listens when others are speaking, asks and answers questions. This student is an active class participant, not an observer.

***Note-taking** is inherent to an engaged learner. These skills will be introduced, modeled, and practiced during this course to build a strong foundation for future mathematics classes.

2. Self-Control: A student demonstrates self-control when he is on task during class sessions and does not allow distractions from other schoolwork, his environment, other people, or screens to interfere. This student also refrains from being a distraction to other students as well by contributing appropriately to the class and remaining on task in the chat, when asked to unmute his microphone, and on video screen.

3. Responsibility: A responsible student is consistently prepared for class with the required materials and arrives promptly for his scheduled session. This student regularly checks the Schoology page for class information and updates and is consistently communicating with his instructor regarding assignments, questions, and requests for assistance.

4. Initiative: This student discerns his own understanding of a topic or assignment and seeks help from the instructor if and when necessary. He receives instructions and feedback from the teacher humbly and applies this to current and future assignments. He not only makes corrections, but reviews the problem or assignment to reinforce the learning. This student utilizes the resources provided for his success in the class and, therefore, takes ownership of his learning.

STUDENT EXPECTATIONS IN ACTION

The instructor will facilitate learning and provide many opportunities for practicing the topics of study. It is the student's responsibility to be an active learner and participant during and in between class sessions. The student should stay up-to-date with assignments and review material as necessary. The student should seek help and ask questions of the instructor in a timely manner.

The student is expected to:

- Arrive on time to class with required materials
- Attend the entire class on video
- Listen attentively
- Mute and unmute microphone as requested by the instructor

- Participate actively during class sessions: orally and/or visually presenting answers, sharing methods for solving problems, explaining procedures, collaborating with classmates, etc.
- Embrace mistakes as learning opportunities and rework problems correctly
- Seek approved assistance (parent, older sibling, classmate) if necessary with assignments or projects
- Complete and submit all assignments by the due date and before the start of class sessions
- No technology of any kind (including calculators) to complete assignments unless approved by the instructor

In order to be well-prepared to learn and participate in the lesson, the student must complete assignments prior to the start of it. If there are extenuating circumstances that prevent the student from completing an assignment, parents should contact the instructor via email prior to the class session to request an extension. Students will scan assignments and upload them to the Schoology assignment window when requested by the instructor.

PARENT EXPECTATIONS IN ACTION

Parents are to ensure that their student has all of the required materials needed for this course, a stable internet connection, a distraction-free environment for class sessions, and adequate time to study and complete assignments outside of class sessions. At this level of study, students may lack confidence to complete assignments independently. As the course proceeds, there will most likely be a transition to more independent study. Please maintain communication with the instructor if you have questions or concerns about the best way to support and/or assist your child.

STUDENT EVALUATION: GRADING

Students work with the instructor as they progress and develop their understanding of mathematical concepts which naturally build in complexity. Therefore, the interaction and conversation between a student and the instructor during class, on assignments and assessments, and during office hours is imperative to communicating a student's level of mastery.

It is our goal within Scholè Academy to pursue restful learning, yet the instructor does wish to provide clarity in the form of a grade on a Mastery Scale for assignments and the overall course. Based on his performance, a student will be placed in one of the following categories:

- Master - a student shows mastery of the material and/or concept
- Journeyman - a student demonstrates satisfactory understanding, but is encouraged to re-view the material and/or concept
- Apprentice - a student will be encouraged to re-work the assignment or assessment and may be provided with additional practice, an invitation to an office hour session, and/or a parent/instructor meeting

The overall goal is to ensure that each student performs at or above the level of Journeyman.

**Inasmuch as you might be fully on board with this grading scale in theory, there may be a need to complete a transcript with either a numeric or traditional letter grade. Traditional percentage grades will be provided upon request. Additionally, the instructor will provide a transcript of the grade at the end of the year per a parent's request.*

STUDENT EVALUATION: CONTENT

Mrs. Riethmiller will communicate with students regarding feedback and grading of assignments through the Schoology online learning management system.

A student's mastery level and grade will be comprised of:

1. Class Participation
2. Binder Components (TBA)
3. Assignments/Independent Practice
4. Projects
5. Assessments

All assignments will be due to the appropriate Schoology assignment folder prior to the start of a given class session. Any Project or Assessment turned in late will earn a 10% penalty for each day beyond the deadline. Projects and Assessments turned in later than a week may not be accepted.

**The instructor may make adjustments and updates at her discretion prior to the week of August 29, 2022 Orientations and these changes will be communicated to enrolled students and parents.*

STUDENT EVALUATION: ACADEMIC DISHONESTY

Students will often complete assessments and/or quizzes privately at home. Students are on their honor to abide by [Scholé Academy's Learning Philosophy](#) which assumes the personal cultivation of Student Virtues described in the Student-Parent Handbook.

Unless otherwise noted, all assignments should be completed without the use of a calculator. Additionally, copying another student's work or the use of Math Solver websites/apps is a serious and punishable offense. Any assignment found to be completed dishonestly will result in a failing grade without the opportunity for resubmission.

THE VIRTUAL CLASSROOM:

We will be using the free online "virtual classroom" by ZOOM, one of the leading companies that provide such software. In this virtual classroom, students will have interactive video, audio, and text chat. We will provide students with a link (sent through email and posted on the Schoology page) that will enable students to join the virtual classroom.

Specific information regarding the required technology used by Scholé Academy can be found by visiting the [Technology in the Classroom](#) section of the Student Parent Handbook.

ABOUT THE INSTRUCTOR:

Joelle Riethmiller believes true education impacts the body, mind, and soul of an individual through all subject areas and promotes personal and virtuous growth through life-long learning.

Mrs. Riethmiller received a BS in Mathematics-Mathematics Secondary Education from Grove City College (1999). While teaching seventh and eighth grade mathematics in public school, she earned a M-ED in Curriculum and Instruction from Gannon University (2002). Mrs. Riethmiller chose to step away from the classroom in 2003 to focus her attention on her young and growing family. In 2007, she embarked on the home education journey with two of her three children. Continuing that journey, she is still experiencing the humbling beauty and depth of true and real life-long learning. She believes her 20 years of sacramental marriage, parenting and home educating her now four children, and her personal faith journey have cultivated a desire to seek truth, beauty, and goodness in all aspects of life.

Mrs. Riethmiller strives to ignite a love for learning and desire for virtue in her students that extends beyond the study of mathematics. She is thrilled to participate in the Scholè Academy mission to cultivate student learning that endures.