



GRADE 6 MATH OPTIONS

GAITHERSBURG MIDDLE SCHOOL, 2012/2013

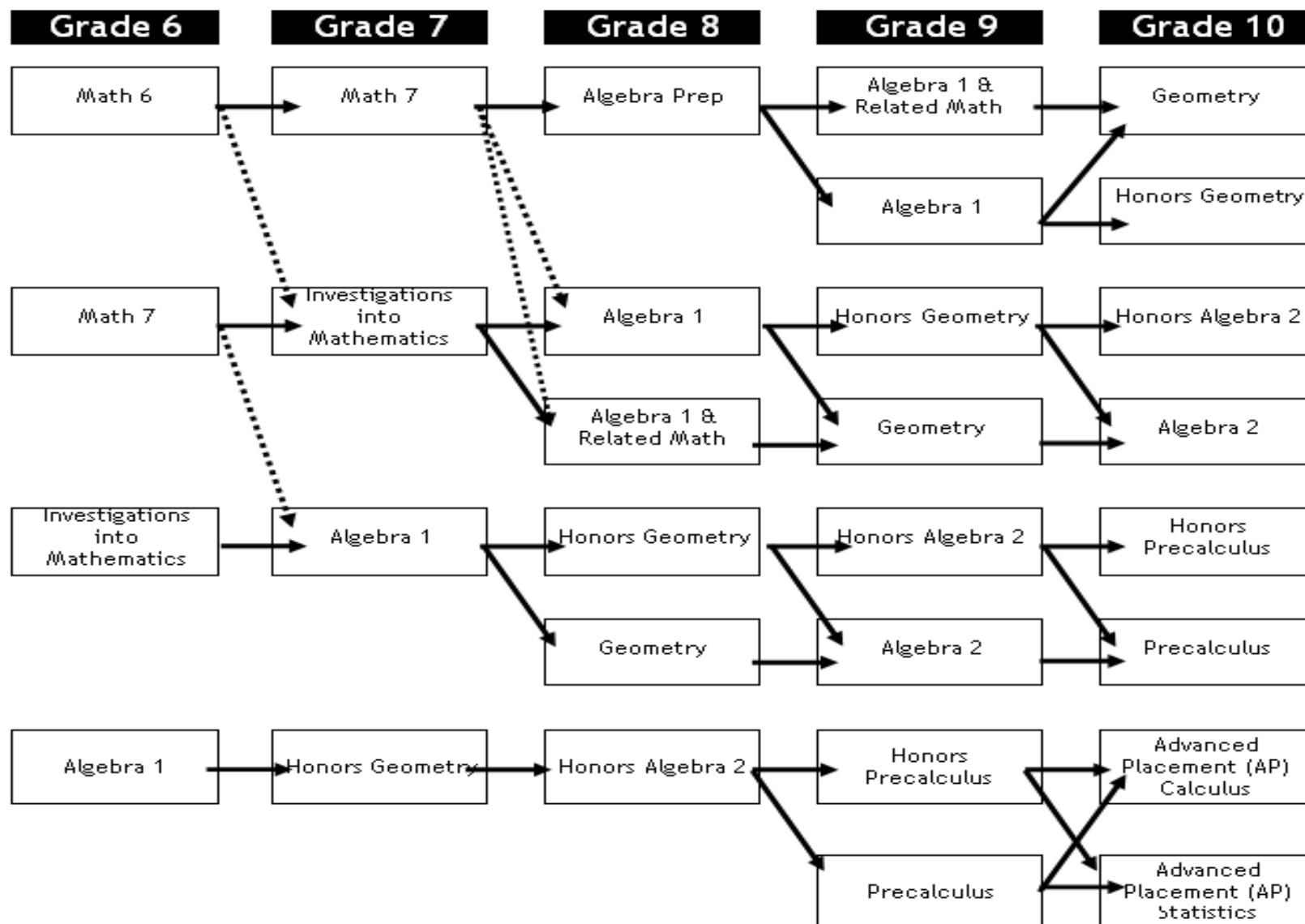
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MATHEMATICS PATHWAYS

2012 - 2013



HOW ARE OUR STUDENTS BEING RECOMMENDED?

- Elementary school teacher recommendations
- **DATA-** MSA scores, MAP-M & MAP-R scores, math grades for each quarter
- Current math course
- Exposure and mastery of extended math curricula

Note: 5th grade teachers have started to make preliminary recommendations for next year. We review each child's recommendation over the summer and recommend changes.

MATH 6

Math 6 extends students' understanding of numbers and computation to include fractions, decimals, and percents.

Units of Study Include:

- Graphing Data and Analyzing Statistics
- Fractions, Decimals and Percents
- Geometry
- Algebra, Patterns and Functions
- Probability



MATH 7

Math 7 extends students' understanding of numbers and computation to include integers and proportional reasoning.

Units of Study Include:

- Data Analysis
- Algebra Relationships
- Geometric Relationships
- Proportional Relationships
- Functional Relationships
- Measurement



This course is for students who have completed the Kindergarten to Grade 5 math curriculum as well as the indicators in Math 6.

IM is an enriched course for students who have successfully completed the Kindergarten to Grade 5 math curriculum as well as the indicators of Math 6 and Math 7. This course is designed for students with exceptional talent in mathematics.

Units of Study Include:

- Statistical Applications and Set Theory
- Real Number Systems
- Investigation of Geometry
- Patterns, Relations, and Functions
- The Language of Algebra
- Other Operational Systems
- Probability



ALGEBRA 1

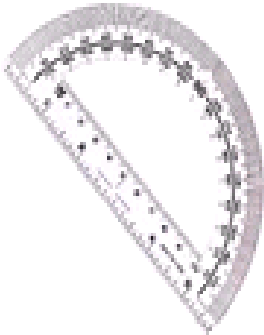

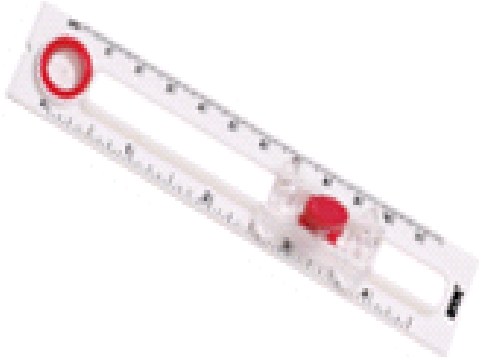
Algebra 1 examines the basic structure of real numbers, algebraic expressions, and functions. Students in this course take the state High School Assessment. This course satisfies the high school Algebra I requirement. High school credit is only awarded to students who passed both semesters of the course and the semester B final exam.

Units of Study Include:

- Equations and Inequalities
- Introduction to Functions
- Linear Equations and Inequalities
- Systems of Equations and Inequalities
- Data Analysis and Probability
- Exponents and Polynomials
- Quadratic and Exponential Functions



SUGGESTED SUPPLIES

Protractor	Compass- Choice 1	Compass- Choice 2
		
<p>Clear Plastic Protractors with a small hole are the easiest for the children to use.</p>	<p>Metal compasses are the easiest for student to use. They won't move around as much as the plastic ones. Compasses with wheels in the middle are the most stable to use.</p>	<p>Safety compasses have unique slides that are easy to adjust and easy to tighten, yet hold firm when students go to sketch a figure.</p>
<p>The protractor above is available at most office supply stores.</p>	<p>The compasses above are available at most office supply stores.</p>	<p>These compasses are available online or at most teacher supply stores.</p>
<p>Cost- \$0.50</p>	<p>Cost- \$2 - \$10</p>	<p>Cost- \$2 - \$4</p>

SUGGESTED SUPPLIES

Algebra 1

Texas Instrument Graphing Calculator (TI-83+ or 84)

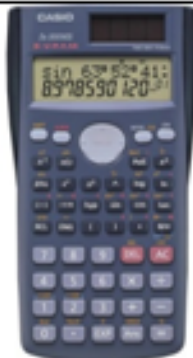


Graphing calculators will be utilized in the Algebra 1 curriculum daily for classwork, homework, and assessments. Graphing calculators can be rented from GMS. Ask your child's Math teacher for a calculator rental form.

Cost: \$120

Scientific calculators are helpful for fractional operations!

Casio
FX-300MS Plus 229



The number sentence stays on the top of the screen. The student can scroll through previous operations. It turns off automatically. This is one of the calculators used by the GMS math department.

Cost- \$15

Texas Instrument
TI-30X IIS



The calculator automatically simplifies fractions. It will also turn off automatically as long as it has a solar panel at the top of the calculator.

Cost- \$17

Texas Instrument
TI-34II

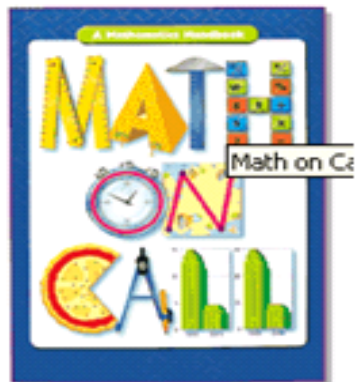


This is one of the calculators used by the GMS math department.

Cost- \$25

SUPPLEMENTAL AIDES

Additional Resources (Optional)

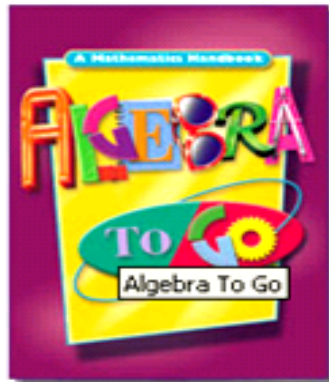


Math On Call

“Math on Call” is a great resource to guide students through complicated tasks. The text is kid friendly and easy to read. This text can be used when reviewing past topics. It also matches some concepts in the IM course.

ISBN #:
0-669-45770-1

Cost:
\$25

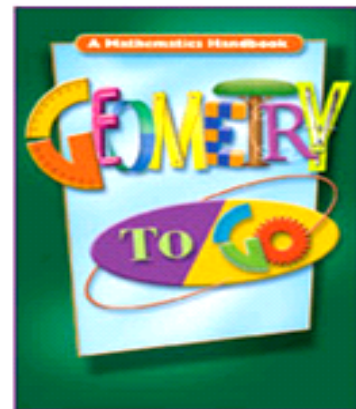


Algebra To Go

“Algebra To Go” is a great resource to guide students through complicated tasks. The text is kid friendly and easy to read. It closely matches our IM and Algebra curriculums.

ISBN #:
0-669-47151-8

Cost:
\$25



Geometry To Go

“Geometry To Go” has kid friendly text that guides students through complicated tasks. It is a great resource for the Algebra 1 curriculum and will also be helpful for high school geometry.

ISBN #:
0-669-47151-8

Cost:
\$25