Livingston Public Schools

"Empowering all to learn, create, contribute, and grow."

Math Information Night for Parents of Incoming 7th Grade Students

1. Overview of the 7-12 Math Program
2. Mathematics Courses Offered at HMS
3. The Placement Process
4. 7-12 Math Sequence

Mathematics Vision

Mathematics Vision

- The mathematics program provides engaging instruction that is fully aligned with the focus, coherence, and rigor of the New Jersey Student Learning Standards (NJSLS).

- In each grade level, instruction is focused on:

  - Conceptual Understanding

  - Application

  - Procedural Skill and Fluency

- Appropriate models of technology are infused throughout the program.

Mathematics Vision

- Multiple and diverse pathways to meet the learning needs of students.

- The mathematics courses in grades 6, 7, and 8 provide students with a strong Pre-Algebra foundation for students to be successful in the high school math sequence.

- Students who are ready to advance mathematically are able to take high school math courses in grades 7 and 8.

- A comprehensive placement process is in place to determine Algebra 1 readiness in grades 7 and 8.

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Course Offerings and Sequence

Pre-Algebra in Grade 7

- Two levels of Pre-Algebra in grade 7:
  - Pre-Algebra 7A
  - Pre-Algebra 7B
- Both courses teach students the foundation for Algebra.
- Aligned to NJSLS.
- Pre-Algebra 7A - faster pace, more depth, students expected to show greater independence.
- Placement is fluid: if students begin the year in B, they can move to A based on performance in class.

Algebra 1 in Grade 8

- Students gain a solid Pre-Algebra foundation in grade 7.

- Students must maintain a C average or better to stay in the course or they are moved to Pre-Algebra 8.

- Students are able to take any level of Geometry at LHS
  - Geometry Honors
  - Geometry CP

Algebra 1 in Grade 7

► High school course

► Material typically covered in grades 7 and 8 are learned through warm-up assignments, homework, and self-study.

► Student must maintain a B average in each marking period or the student is dropped from the course.

► Students take Geometry in grade 8.

Algebra 1 in Grade 7

► If students are struggling in Geometry in grade 8, there is no other course for them to take. Students cannot retake Algebra.

► Students must not only have the skills and math ability to accelerate, they must also have the appropriate maturity level to meet the demands of a high school course.

Geometry in Grade 8

► Advanced course that follows the high school Geometry Honors curriculum.

► Students apply algebraic concepts (solid algebra foundation required).

► Students explore concepts and make own conclusions.

► Questions require students to apply several different skills and concepts.

Basic Skills Instruction (BSI):

- Students who struggle to perform at a minimum level of proficiency to meet the NJSLS will be scheduled for the BSI program.

- Criteria include:

    - Teacher recommendation

    - District level math assessment (if applicable)

    - Previous BSI support

    - Standardized test scores

- Students in BSI receive additional support within the mathematics classes and in occasional small group settings.

The Placement Process

7-12 Mathematics

► Comprehensive placement process relying on the following data:

  ► Standardized test scores (OLSAT, NJSLA/PARCC)
  ► Algebra Readiness Test
  ► Student performance in class
  ► Teacher feedback

► Placement in grades 7 and 8 determine the mathematics sequence students will follow in high school.

Grade 6 into 7 Placement Matrix

Student	Teacher	Math Level 15-16	Math Level 16-17	Matrix Score	MP 1	MP 2	MP 1 & 2 Avg.	Place Test	Trec	OLSAT %	OLSAT-TOT	OLSAT-V	OLSAT-NV	NJASK-3V	NJASK-3 M	NJASK-4V	NJASK-4 M	PARCC5-VS	PARCC5-VPL	PARCC5-MS	PARCC5-MPL
Student 1	Teacher 1	A	Alg. 1	100	99.82	98.28	99.25	50	20	99	145	134	149	300	300	300	300	812	5	840	5
Student 2	Teacher 2	A	A	84	84.92	90.04	87.48	47	17	48	99	100	98	225	270	230	280	772	4	780	4
Student 3	Teacher 3	B	A	81	93.76	91.87	92.82	37	18	69	110	105	114	238	285	210	268	745	3	749	3
Student 4	Teacher 4	C	A	80	87.12	84.97	86.05	39	16	73	112	120	102	240	276	208	280	752	4	735	3
Student 5	Teacher 5	C	B	76	90.60	88.50	89.55	37	15	60	103	107	105	224	253	218	205	NA	NA	NA	NA

Placement Process

- ▶ Placement data is gathered in the spring.
- ▶ Meeting with teachers, math supervisors, HMS Principal and Director of Curriculum and Instruction to review placement.
- ▶ Careful discussions about students, especially about those on the border of course cut-off scores.
- ▶ For students in the "grey area", placement is reviewed again in May and MP 3 grades and teacher input are used to finalize placement.

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Placement Process

- ▶ Placement information available in the Genesis Parent Portal in June.

- ▶ After reviewing placement information, parents must submit a written notification (e-mail) to the building principal at HMS and 7-12 math supervisor if they wish their child's math placement to be revisited.

Mathematics Scope and Sequence: 7 - 12

Grade 7 and 8 Math Sequence

Math placement is a data driven process.
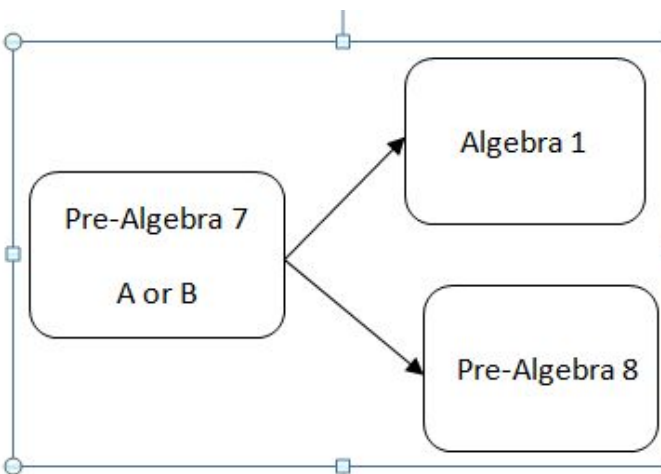
Criteria include: marking period grades, placement test score, teacher recommendation score, and standardized test scores (NJSLA/PARCC, OLSAT).

Students placed in Pre-Algebra 7B may be moved into Pre-Algebra 7A at any given point during the school year if the student demonstrates readiness.

To stay in Algebra 1, students must maintain a C average or better. If a student is not maintaining this average, he/she will be moved to Pre-Algebra 8.

Pre-Algebra 7

A or B

Algebra 1

Pre-Algebra 8
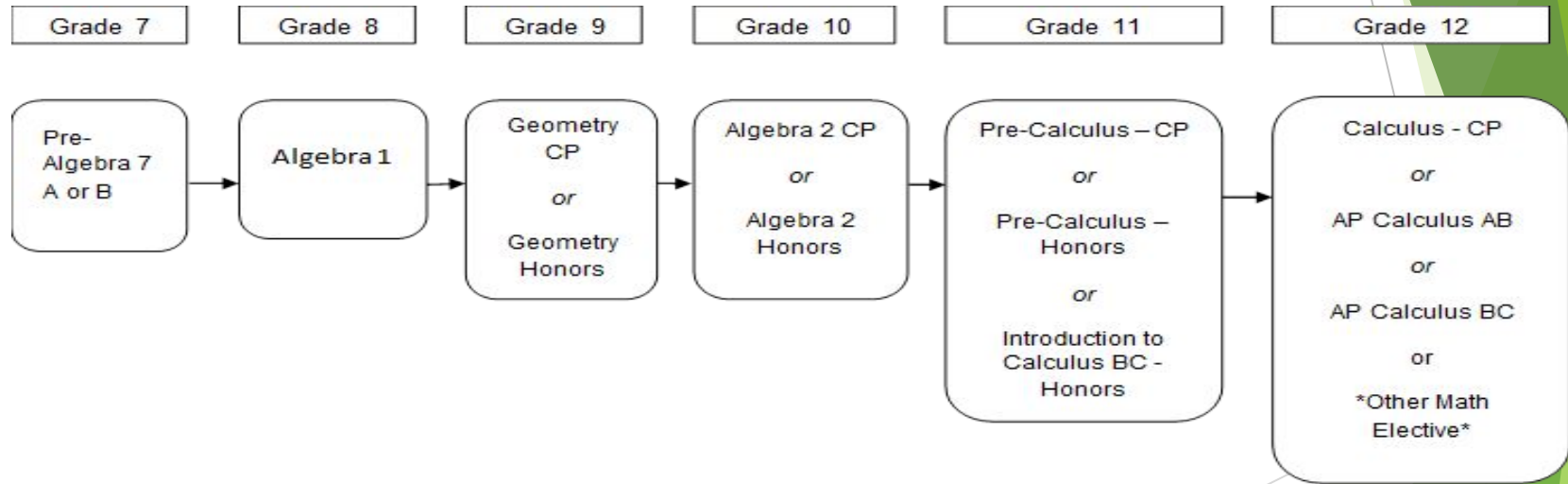
Grade 7 and 8 Math Sequence

► A very small percentage of students are placed in Algebra 1 in grade 7.

► Students must meet several rigorous criteria to be recommended for placement in Algebra 1 in Grade 7.

► Students must maintain an average of B or better in order to stay in Algebra 1. If not, they are moved into Pre-Algebra 7 A.

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7-12 Mathematics Sequence Possible Pathways for Students

Students take Algebra 1 in Grade 8

Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Pre-Algebra 7 A or B	Algebra 1	Geometry CP *or* Geometry Honors	Algebra 2 CP *or* Algebra 2 Honors	Pre-Calculus – CP *or* Pre-Calculus – Honors *or* Introduction to Calculus BC - Honors	Calculus - CP *or* AP Calculus AB *or* AP Calculus BC *or* *Other Math Elective*

7-12 Mathematics Sequence Possible Pathways for Students
Students take Pre-Algebra in Grade 8

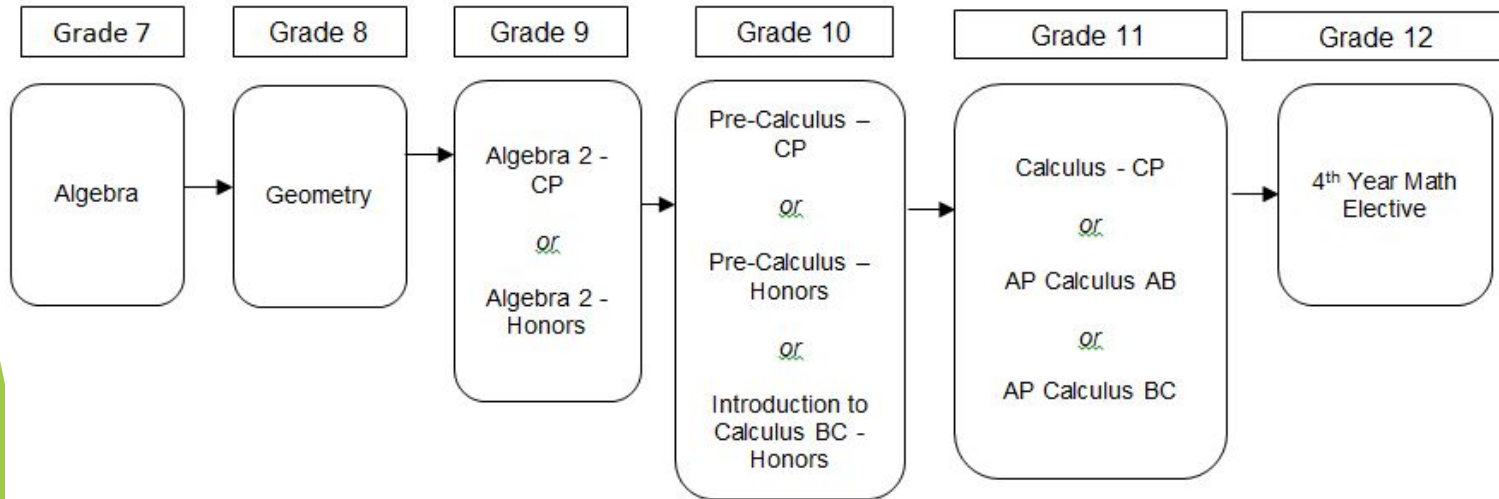| Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Pre-Algebra 7 A or B	Pre-Algebra 8	Algebra 1 CP *or* Algebra 1 Honors	Geometry CP *or* Geometry Honors	Algebra 2 CP *or* Algebra 2 Honors	Pre-Calculus CP or Precalculus Honors or *Other Math Elective*
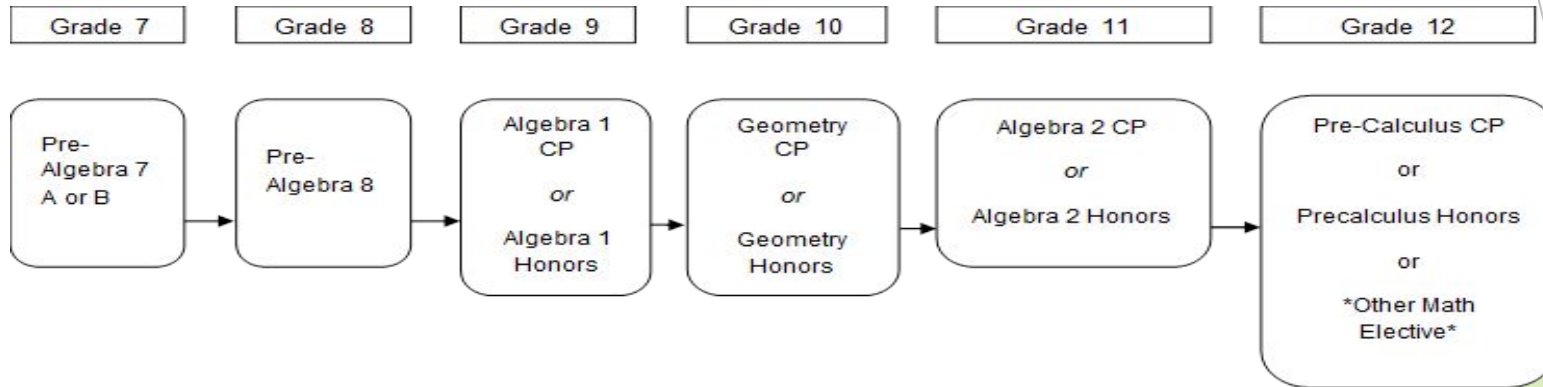
Note: Students may double up in Geometry and Algebra 2 in 10th grade and take Pre-Calculus in 11th grade and Calculus in 12th grade.

7-12 Mathematics Sequence Possible Pathways for Students

Students take Algebra 1 in Grade 7

Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Algebra	Geometry	Algebra 2 - CP *or* Algebra 2 - Honors	Pre-Calculus – CP *or* Pre-Calculus – Honors *or* Introduction to Calculus BC - Honors	Calculus - CP *or* AP Calculus AB *or* AP Calculus BC	4th Year Math Elective

Resources

For questions about the 7-12 math program, contact Antonio Matheus (973)535-8000 X 8052 or e-mail amatheus@livingston.org.

K-12 Mathematics Curriculum

https://www.livingston.org/Page/29029