



Math Curriculum

Rocky Run Middle School

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Young Hong Director of Student Services

Lorraine Marshall School Counselor

Laura Hornberger Math Department Chair



Goals for the Evening

- Understand the secondary Math course options in FCPS
- Identify considerations when selecting a course for next year

“Why do I need to learn this?”





Career Interests

Start with thinking about what you are passionate about.

Course Pathways

Make an informed decision about which courses will be available for your student to enroll. Make a four year plan!

Graduation Requirements

We hope our students are engaged in mathematics courses each year of their K-12 career.

Career Path Ex 1

Entrepreneur/Small Business Owner

- Algebra 2
- Data Science
- Prob/Stats or AP Statistics/





Career Path Ex 2

Aircraft Systems Engineer

- Precalculus
- AP Calculus
- Computer Science

Career Path Ex 3

School Counselor

- AFDA or Algebra 2
- Prob-Stats or Discrete Math



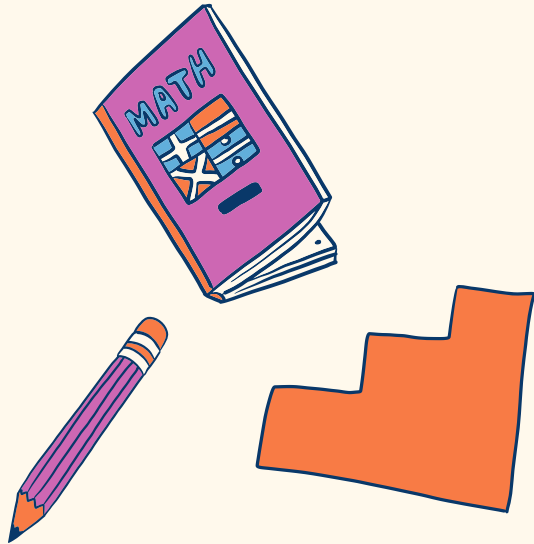


Career Path Ex 4

AI Prompt Engineer

- Precalculus
- Data Science
- Computer Science

Graduation Requirements for Math



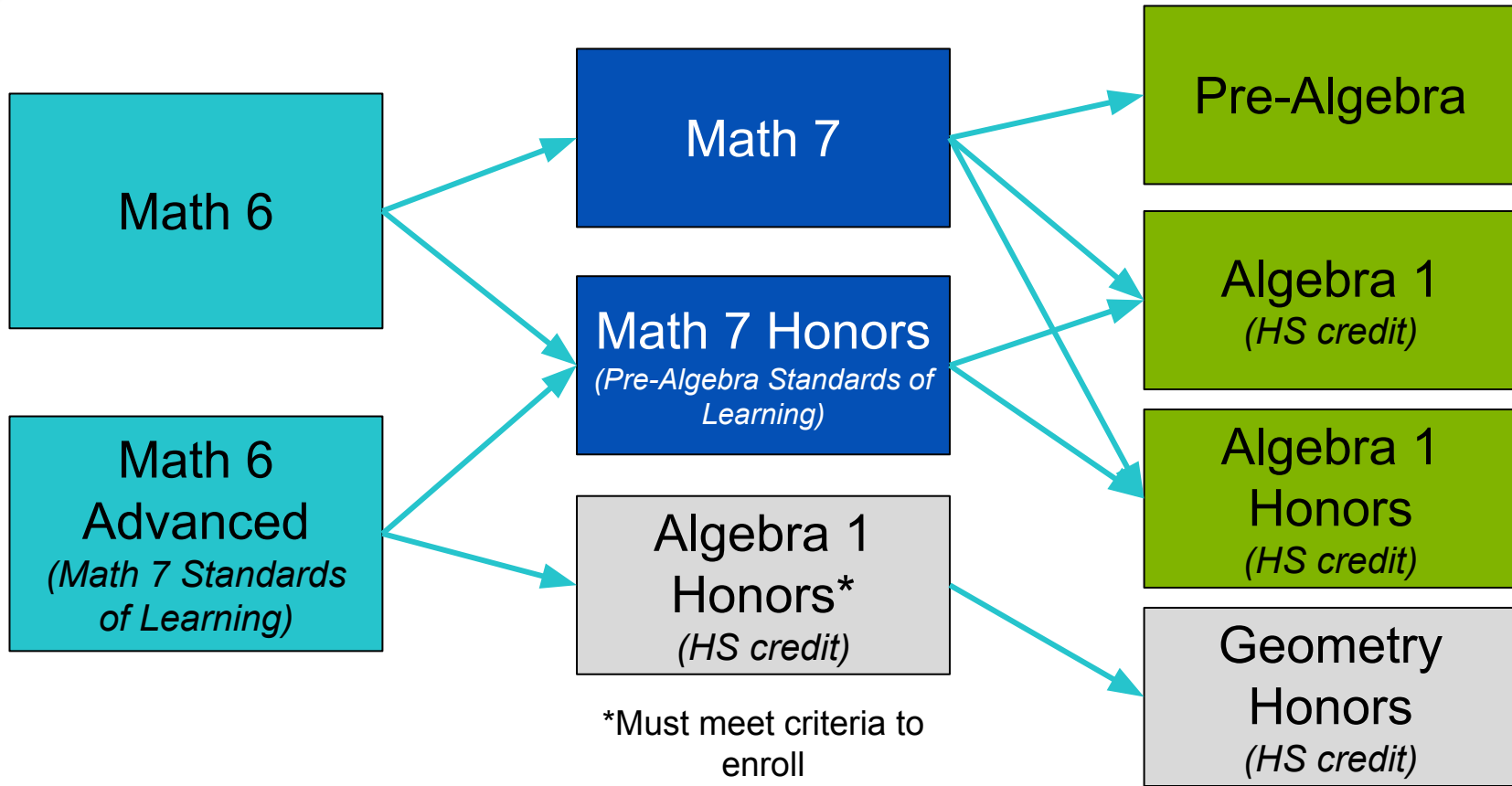
at least two different course selections from among: algebra I, geometry, algebra functions, and data analysis, algebra II, or other mathematics courses approved by the board to satisfy this requirement

Standard Diploma
3 math credits

at least three different course selections from among: algebra I, geometry, algebra II, or other mathematics courses above the level of algebra II. The board shall approve courses to satisfy this requirement.

Advanced Diploma
4 math credits

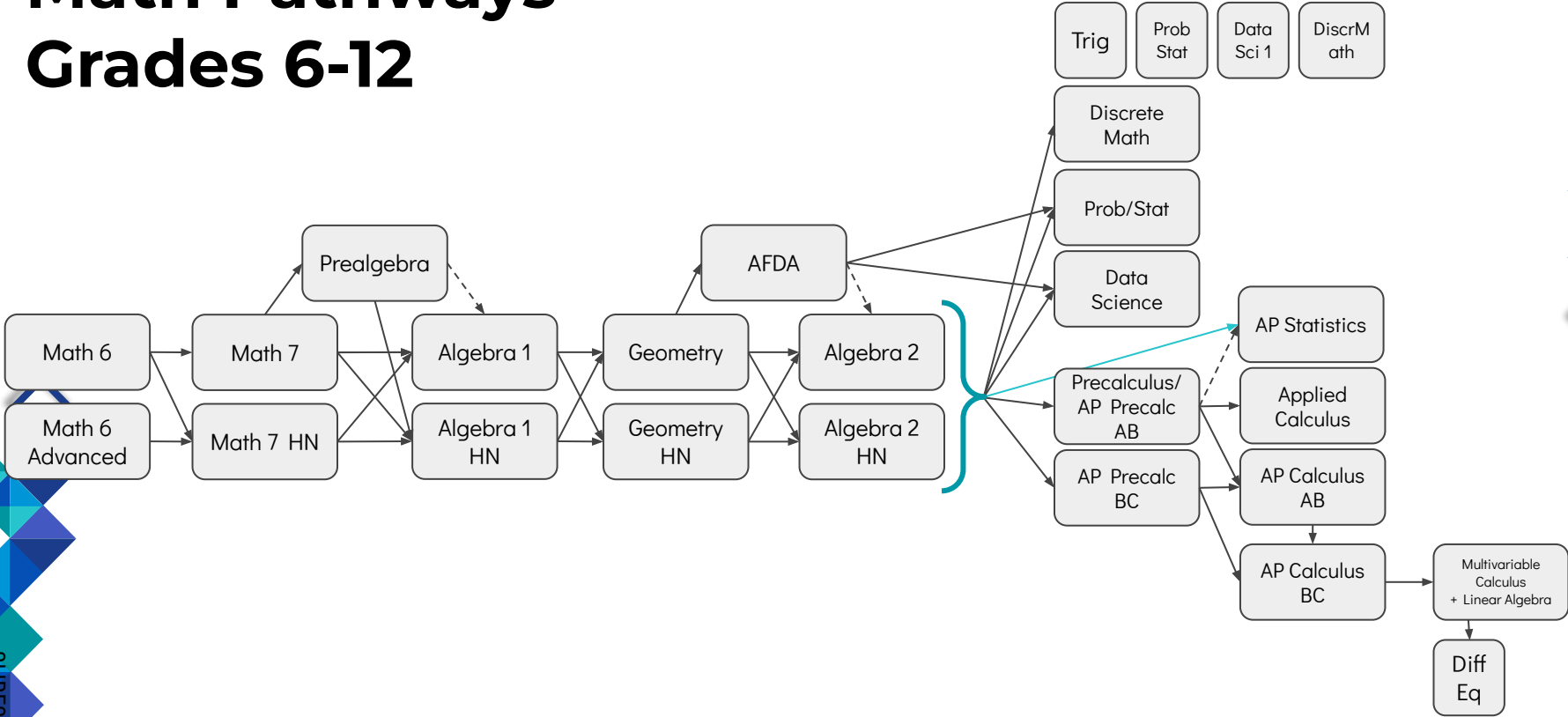
Math Options Grades 6-8



*Must meet criteria to enroll

Math Pathways

Grades 6-12

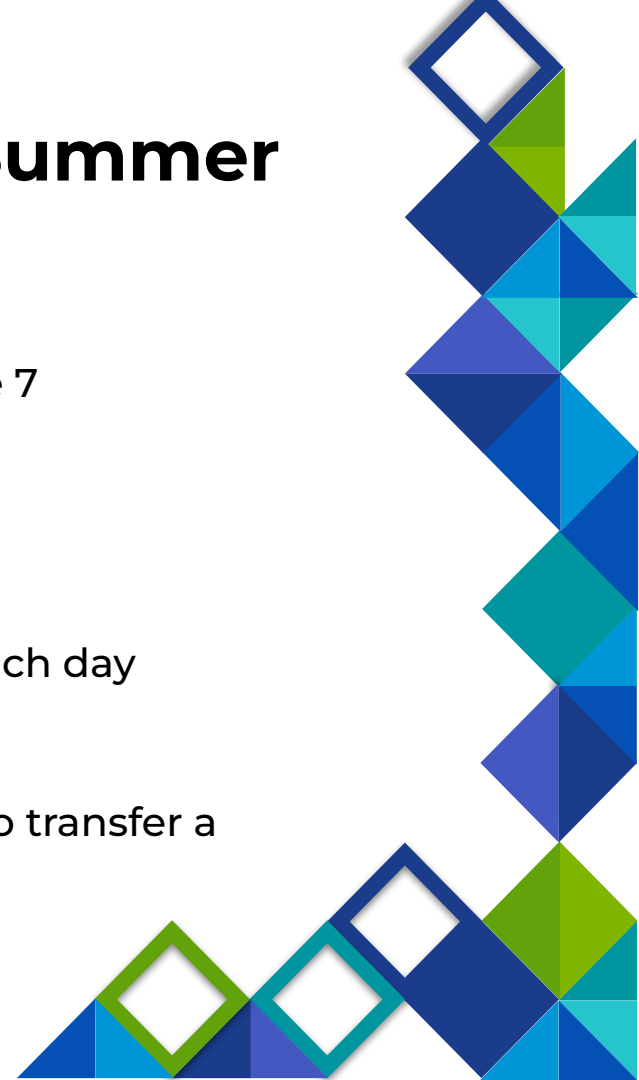


HS Courses for Credit over the Summer

FCPS Online Summer Learning

- Registration opens January and goes through June 7
- Available Math Courses
 - Algebra 1 Repeat Students Only
 - Geometry and Geometry Honors
 - Algebra 2
- 6-7 asynchronous hrs and a mandatory live class each day
- In person testing for midterm, final and SOL

Outside of FCPS Program - Prior approval required to transfer a course credit

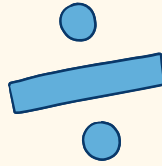
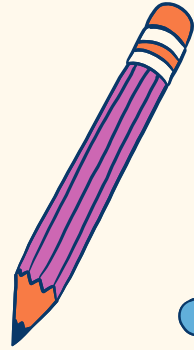




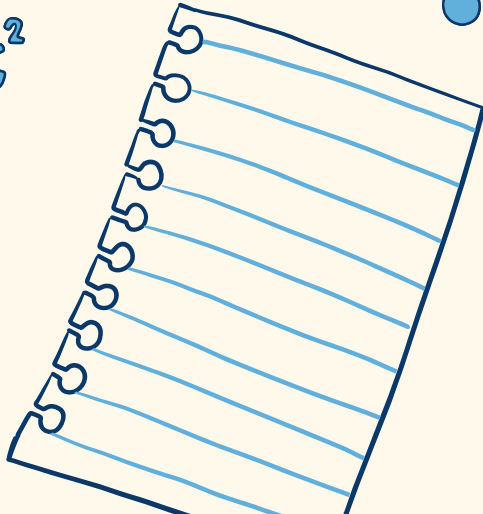
What's Next?

Academic Advising in Jan-Feb

- Rising 8th Grade
 - Counselor lessons and individual advising
 - Math teacher feedback
- Rising 9th Grade
 - HS counselor presentation at RRMS
 - Individual advising with RRMS counselor
 - HS Curriculum Night and Activity Fair
 - HS visits



$$a^2 + b^2 = c^2$$



Thank You!

Any Questions?
Contact your child's
math teacher and
counselor



What mathematical habits are expected?

Students in honors or advanced courses will develop the aforementioned skills AND are

- Enthusiastic for challenging math problems
- Eager to solve problems 2 or more ways
- Excited to explain thinking and ask others about their thinking
- Seeking connections between topics in math class and with other classes
- Willing to take initiative in rigorous work
- Willing to demonstrate fluency of mathematical ideas without a calculator



What should a student consider when selecting a course?

- Long-term goals (in mathematics and other courses) *It's ok if a student doesn't have their whole future planned at age 12! Instead, frame this as "what doors does my child want to leave open?"*
- Interest and passion in mathematics
- Current interest and comfort level with most essential content
- Mindset about myself as a mathematics learner (Fixed vs. Growth)



What should a student consider when selecting a course? *(con'd)*

- What mathematics behaviors do I see in myself?
 - Flexibility of thinking -- Procedures (“When I see this, then I do this.”) vs. Concepts
 - Where is your child’s focus -- Making sense of mathematics vs. the right answer
 - Resilience and Perseverance
- **Balance!**
 - Coursework
 - Extra curriculars
 - Hobbies