# Kilmer Middle School Grade 8 Mathematics Curriculum

#### Grade 8 Mathematics Course Options

#### Pre-Algebra

• 8<sup>th</sup> grade standards

#### Algebra 1

• High school credit course

#### Algebra 1 Honors

High school credit course

#### Geometry Honors

- For students who completed Algebra 1 in grade 7
- High school credit course

## Grade 8 Mathematics

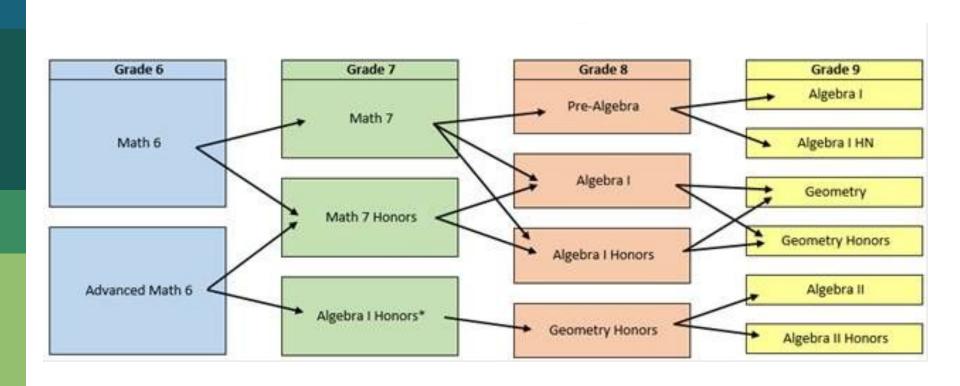
- Pre-Algebra The course covers the Math 8 SOLs. The content prepares students for Algebra in Grade 9. Students take the Math 8 SOL.
- Algebra 1 Students will use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze behaviors of functions.
- Algebra I Honors A fast-paced approach to Algebra I, which includes many extensions to the Algebra I SOLs.
- Geometry Honors This course emphasizes two— and three dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve real-life problems.



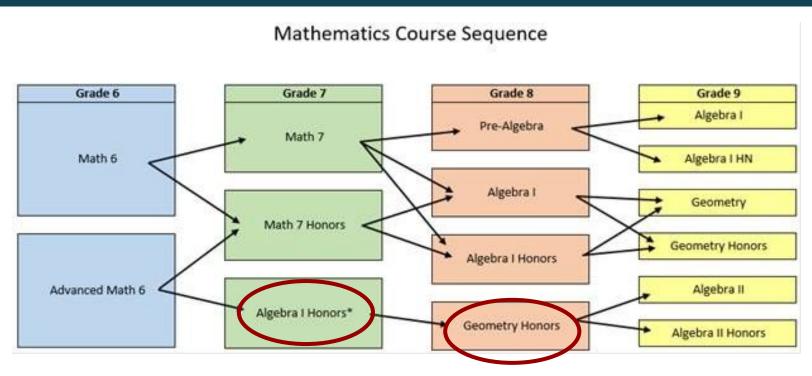
# VDOE 2023 Mathematics Standards

- Approved August 31, 2023
- Fully implemented in 2024-2025 School Year

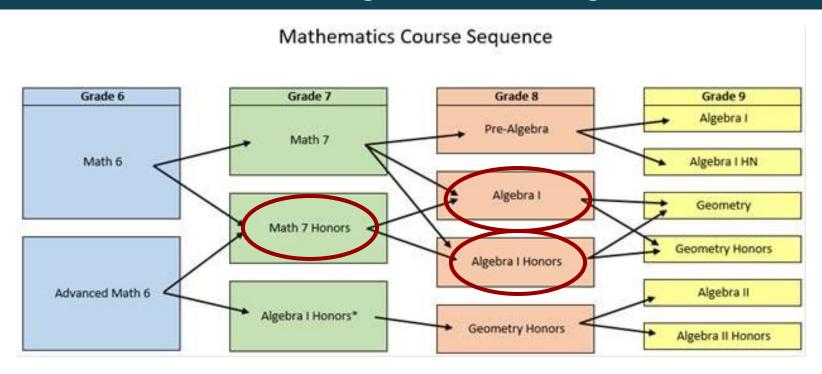
# Math Course Sequence



# Current Algebra 1 Honors Students: Move to Geometry Honors



### Current Math 7 HN Students: Choose between Algebra 1 and Algebra 1 HN



#### Who should consider taking Algebra Honors?

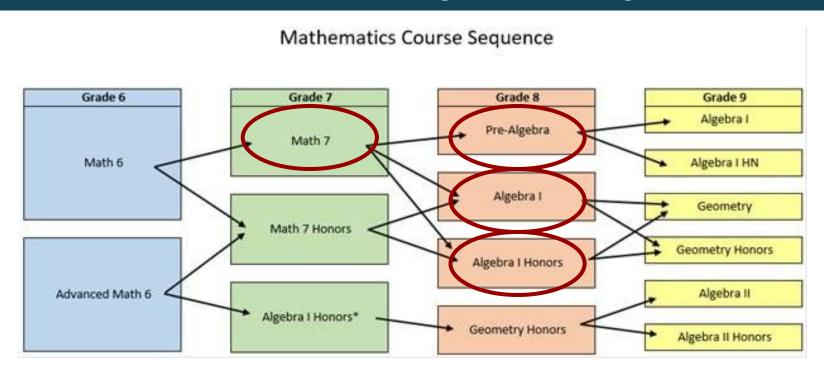
- Student is motivated and willing to work hard
- Student is currently performing well in Math 7 HN and has high passed previous SOLs
- ▶ 7th grade math teacher provides feedback indicating that the student has developed skills needed for Algebra Honors
- While Algebra Honors is open enrollment, families must make this decision thoughtfully

# Why take Algebra Honors?

- Algebra 1 Honors in 8th grade is needed to apply to TJHSST
- Boost to GPA
- Challenge
- Enter high school math honors track

#### Current Math 7 Students:

#### Choose between Pre-Algebra and Algebra 1



# Why take Algebra?

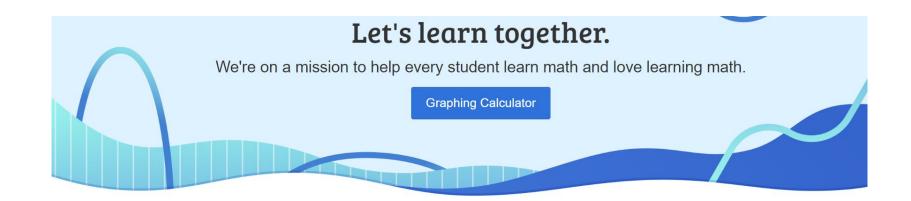
- Algebra 1 in 8th grade is needed to complete IB sequence
- Allows students to access advanced level math courses in high school which can earn college credit
- Advanced level math courses are often prerequisites for postsecondary STEM majors
- Allows students to challenge themselves mathematically
- Early start on earning high school credits

# Opportunities for Support

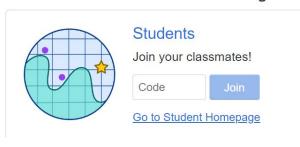
 Algebra Prep: Summer program (and materials) intended for students moving from Math 7 to Algebra

8th grade Algebra Readiness:
 Algebra support class offered to 8th grade
 Algebra students

## Resource: Desmos.com



#### Using Desmos Classroom?





# Resource: TI-84+ calculator

- All Algebra classrooms have a class set
- Used in most high school math courses, SAT, AP tests
- No longer allowed on SOL



# Resource: MathSpace

- Online techbook
- Access through Schoology and Clever (Google login)
- Practice problems with feedback



Mathspace

DISTRICT

# Resource: Delta Math



- Unlimited practice problems
- Targeted practice by benchmark
- Web based with Google login

# High School

- Algebra and Geometry are high school credit classes which will appear on the student's high school transcript
- Middle school students can expunge courses taken for high school credit
- If a course is expunged, the verified credit from the SOL is also expunged
- 3 math classes are required for Standard Diploma
- 4 math classes are required for Advanced Diploma

# **Contact Information**

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