

LJMS Grade 7 Math Curriculum Night 2025



Grade 7 Mathematics Course Options

Mathematics 7
7th grade standards

Mathematics 7 Honors

Pre-Algebra standards +
extensions

(Open access)

Algebra I Honors
criteria:

- Advanced Math in 6th grade,
- 500+ on 7th grade SOL, and
- 91st percentile on Iowa Algebra Aptitude Test

(Algebra I is a high school credit course.)

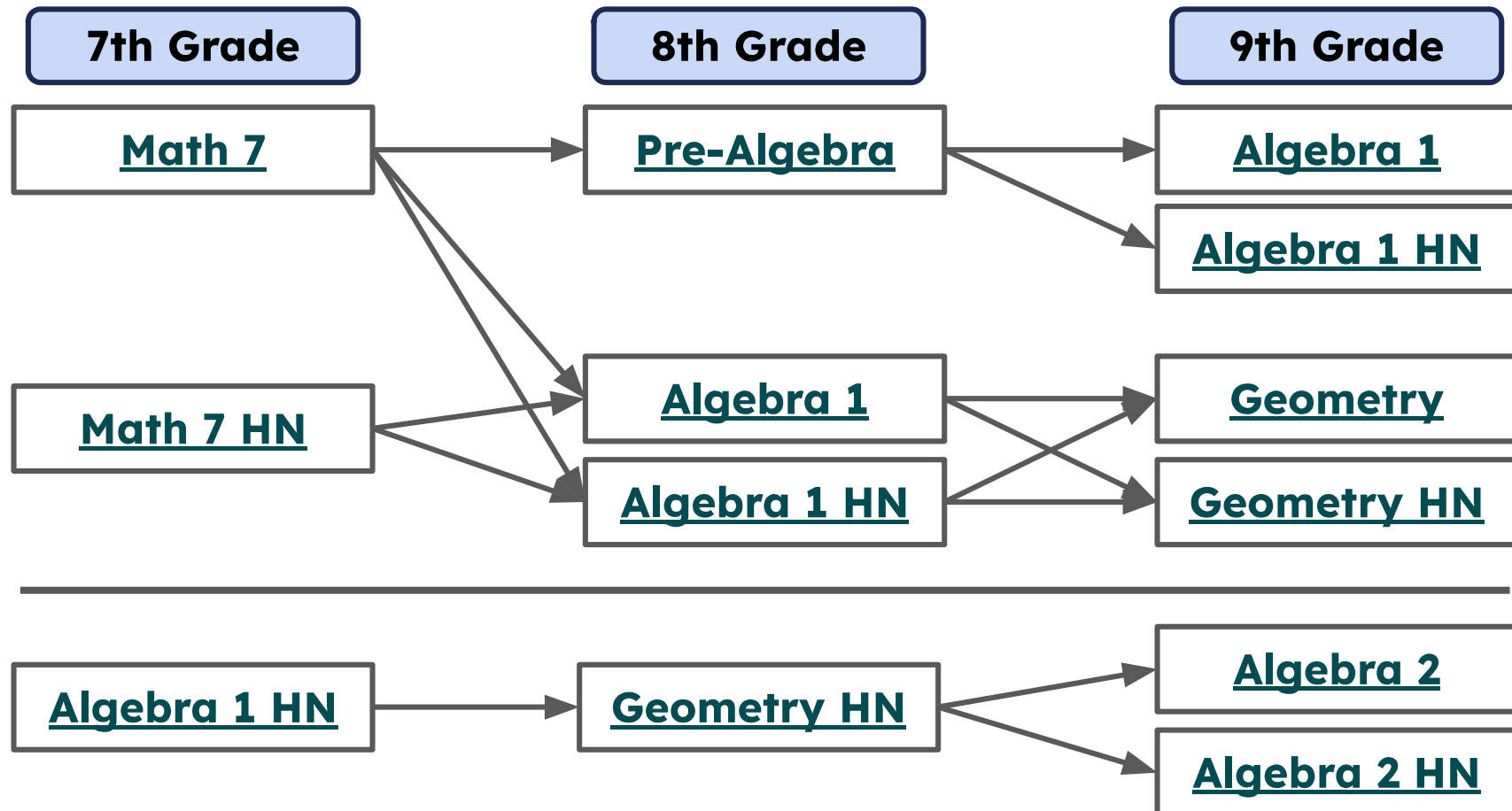
Grade 7 Mathematics

- **Math 7 - A curriculum which considers the foundations of Algebra with an emphasis on rational numbers and their operations. Students in Math 7 take the Math 7 SOL.**
- **Math 7 Honors - A more rigorous approach to a our grade 8 pre-algebra curriculum with an emphasis on problem solving and incorporates extensions above and beyond the standard 8th grade curriculum. This course prepares students for Algebra 1 or Algebra 1 Honors in grade 8. Students in Math 7 Honors take the Pre-Algebra SOL.**
- **Algebra I Honors - A fast-paced approach to Algebra I, a high school credit course, which includes many extensions to the Algebra I SOLs. Students must qualify for this course by meeting 3 criteria.**



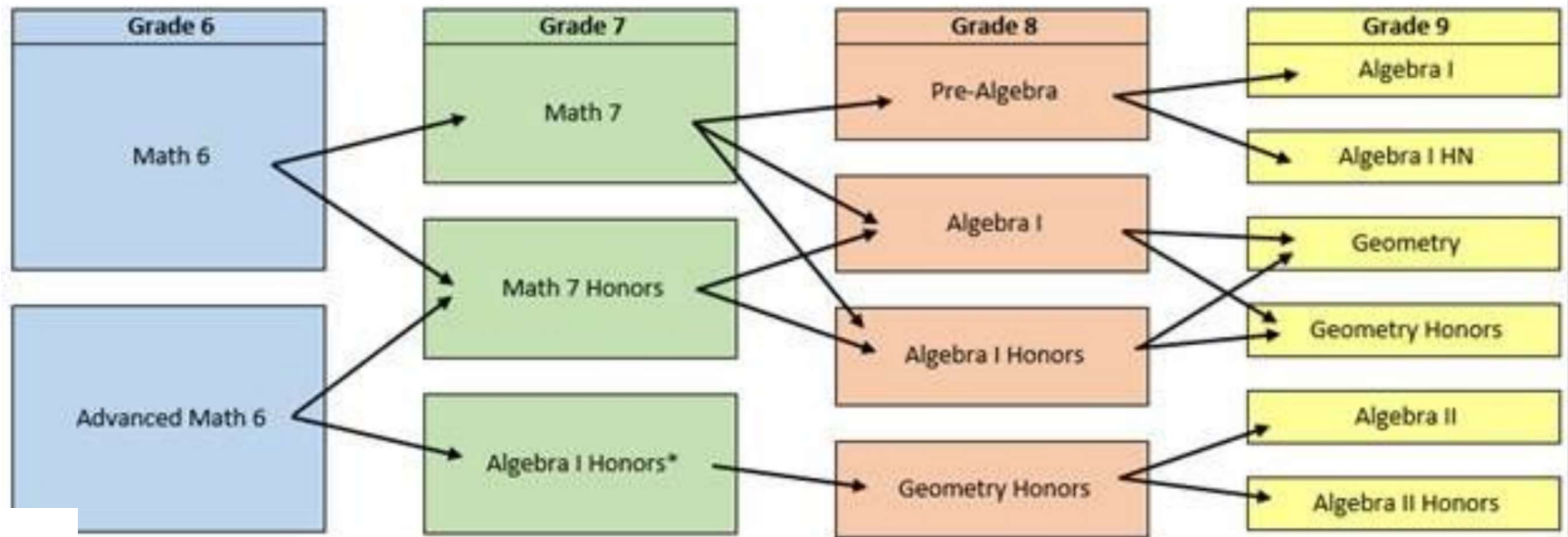
[*Further sequence](#)

FCPS Math Course Pathways



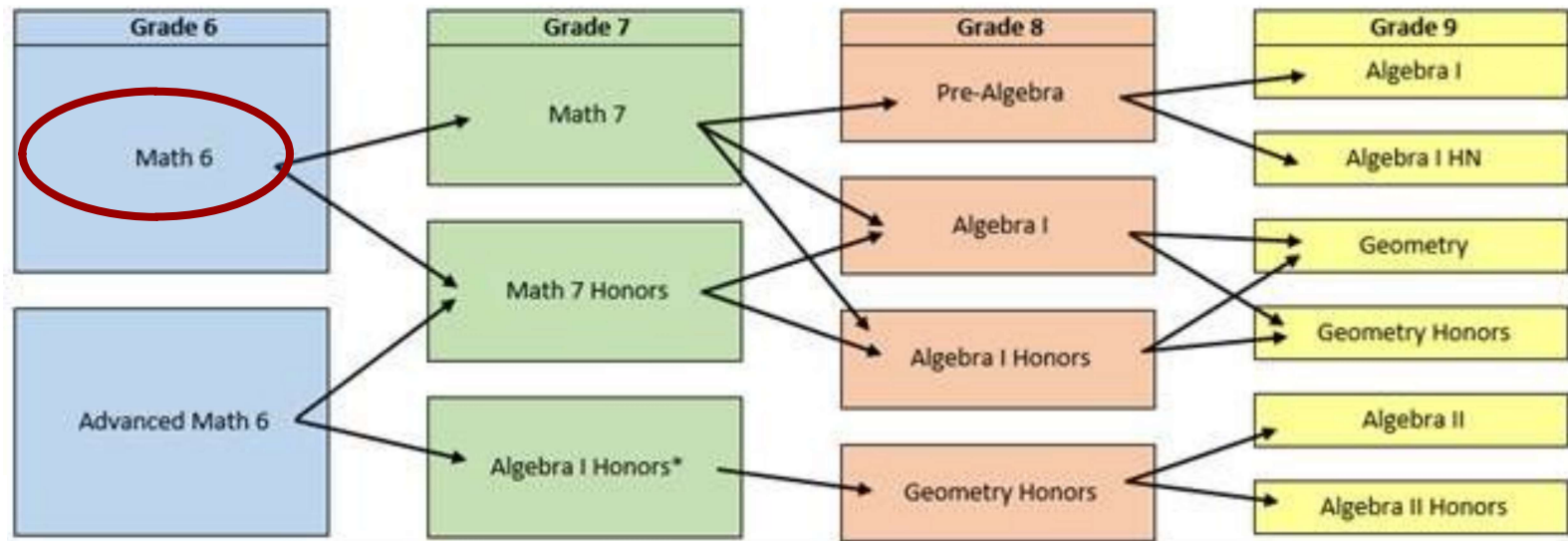
Current Math Course Sequence

Mathematics Course Sequence



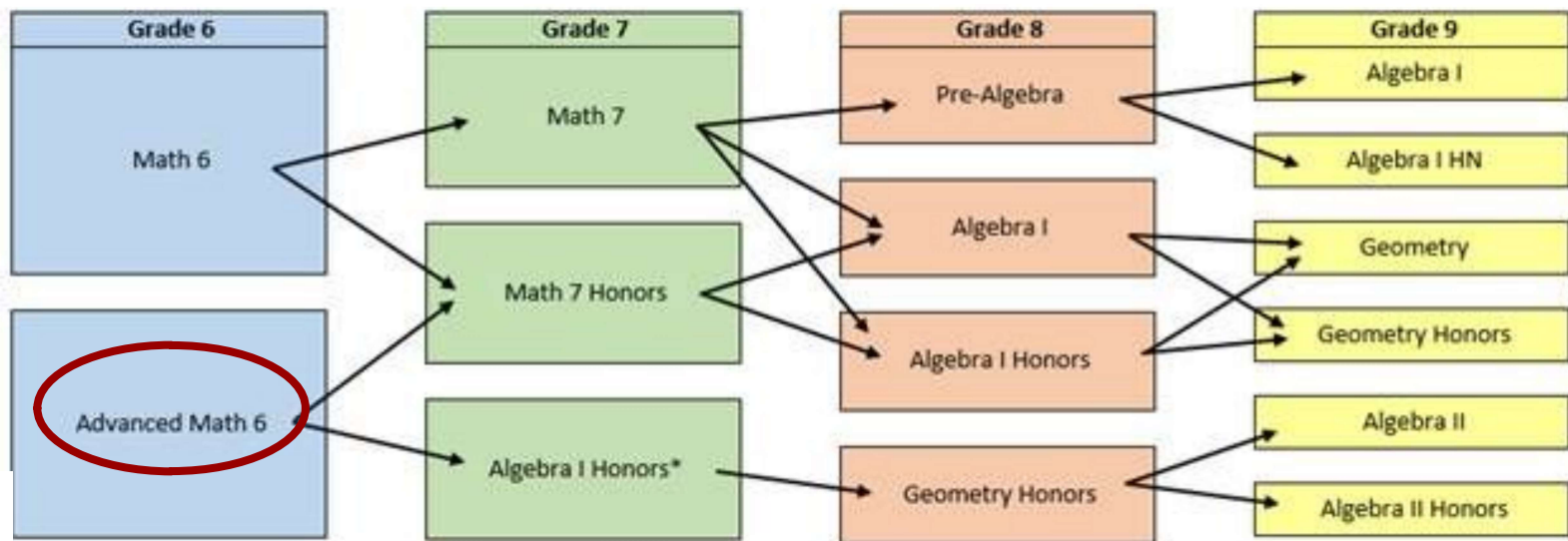
Current Math 6 Students Move to Math 7 or Math 7 Honors?

Mathematics Course Sequence



Current Advanced Math 6 Students: Move to Math 7 Honors or Algebra 1 Honors?

Mathematics Course Sequence



7th grade Math Information

Math 7	Math 7 HN	Algebra I HN
<ul style="list-style-type: none">• On Grade Level• Prepares students for Pre-Algebra or Algebra I• Takes Math 7 SOL	<ul style="list-style-type: none">• Pre-Algebra (aka Pre-Algebra or Math 8) standards + extensions• Prepares students for Algebra I or Algebra I Honors• Takes Pre-Algebra SOL (8th grade math)	<p>Criteria include:</p> <ul style="list-style-type: none">• advanced math completed in 6th grade• Score 91% on the IAAT,• Score Passed Advanced on the Math 7 SOL <p><i>*Is a high school credit course</i></p> <p><i>**Students take Geometry Honors as 8th graders</i></p> <p><i>***Students Take Algebra SOL</i></p>

Students must meet all of these criteria to take Algebra I HN in grade 7



Algebra 1 Honors Criteria (Grade 7)

- ▶ 91st percentile or higher on the IAAT
- ▶ Pass Advanced on the Math 7 SOL (500 +)
- ▶ Completion of Advanced Math 6
- ▶ All students are placed in Math 7 Honors until all scores and final marks are received
- ▶ Placement decisions occur over the summer – Parents notified in Mid-July if their child will be placed in Algebra 1 Honors.



Why students should consider taking Math 7 HN?

- ALL current 6th graders will take Alg 1 by 8th grade
- Math 7 HN is pre-algebra, the best preparation for entering Algebra as an 8th grader
- Students who have struggled in Math 6 will receive support to help them experience successful outcomes in Math 7 HN
- Alg 1 Honors in 8th grade is needed to apply to TJ so students interested in applying should take at least Math 7 Honors in 7th grade



Why take Math 7 HN and Alg 1 Honors?

- | | |
|---|--|
| <ul style="list-style-type: none">• Content is more closely aligned with the Algebra content• Opportunity to take an honors course which is not a high school credit course• Supports are in place to support students moving from Math 6 to Math 7 Honors including:<ul style="list-style-type: none">○ Advisory support class○ Algebra Readiness Class | <ul style="list-style-type: none">• Earlier participation in Algebra allows students additional time to take higher level math courses• Increases access to college and career opportunities, particularly in STEM fields• May allow for more academy classes opportunities in high school |
|---|--|



Algebra Readiness Skills included in Math 7 Honors (not in Math 7):

- Solving Multi-step Equations
- Solving Multi-step Inequalities
- Graphing Linear Equations
- Surface area and volume
- Application of Equations in Geometry



Comparison of 3 Levels

Math 7

$$\frac{h}{2} + 5 = 27$$

Answer has one solution

Math 7 Honors

$$2(4x - 3) - 8 = 4 + 2x$$

Answer has one solution

Algebra Honors

$$3(x+1) + 1 + 2x = 2(2x+2) + x$$

Answer has *infinite solutions*

$$(8 - 7)^2 \cdot 3 + 8 \div (-2)$$

Students learn Order of Operations in Math 7 that include negative numbers

$$\frac{-3[2^2 + (3 \cdot 6)]}{\sqrt{25} + (12 \div -2)}$$

Order of Operations with negative numbers is assumed prior knowledge, students start incorporating square roots, cubes, absolute value, and nesting

$$\frac{\sqrt[3]{-216} \cdot [10 + (\sqrt{16} - 22)]^3}{8^2}$$

*Math 7 and PreAlgebra is assumed prior knowledge; students begin incorporating positive and negative cube roots