

# WE'RE ALL IN

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# Family Math Newsletter

## Kindergarten

We are learning to add sums to ten by counting all, counting on, and five and some more (making a group of 5).

At home, when your child is playing with toys ask them questions like, "You have 4 balls. If I give you three more, how many do you have altogether?"

Count All

Count On

Five and Some More

## First Grade

We are learning to subtract within 20 using strategies like Count Back, Make a Ten, and Think Addition.

At home, ask your child questions about taking away toys, eating cookies, or spending money. For example, "If I give you \$16 and you buy a toy that is \$9, how much money do you have left? Give them 1-, 10- and 5-dollar bills (real or play) to work through the problem. Allow them to use the strategy of their choice and explain it.

Count Back

Make a Ten

Think Addition

$9 + \underline{\quad} = 16$

Hmm... 10 + 6 would be 16. One more is 7.

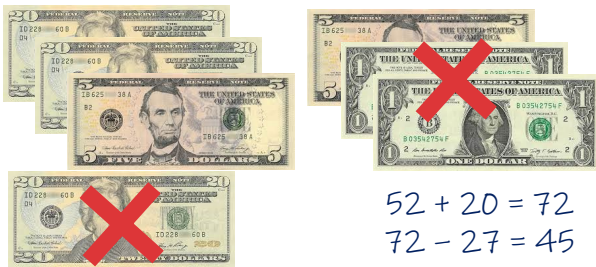


## Second Grade

We are learning to solve one- and two-step addition and subtraction word problems with whole numbers to 100 including problems with length and money (coins to 100¢ and dollar bills to \$100).

At home, ask questions about everyday objects and scenarios such as getting/sharing candy and earning/spending money. Give your child these objects to help them think through the problem.

You have \$52 saved and earn another \$20 doing chores this month. If you buy a toy for \$27, how much money will you have left?



$$52 + 20 = 72$$

$$72 - 27 = 45$$

## Third Grade

We are learning to solve one- and two-step problems using addition, subtraction, multiplication, and division with temperature (to the nearest degree), liquid volume (to the nearest milliliter and half or quarter cup), and time to the nearest minute.

In everyday situations at home, ask your child questions such as, "What if the amount was doubled?" or "What if it was 3 degrees warmer?"

Your bedtime is at 7:30. You need 5 minutes to brush your teeth, 10 minutes to change, and 20 minutes for me to read you a story. What time do you need to start getting ready for bed?



## Fourth Grade

We are learning to plot, order and compare fractions (with denominators of 10 or 100) and identify their equivalent decimals to the hundredths. Helping students know that  $\frac{3}{10} = \frac{30}{100}$  and 0.4 is the same as 0.40 are essential understandings for fraction and decimal number sense in later grades.

At home, make the connection between fractions and dimes/pennies.



3 dimes is three-tenths of a dollar which is the same amount as 30 pennies.

$$\frac{3}{10} = \frac{30}{100} \quad 0.3 = 0.30$$

5 pennies is five-hundredths of a dollar.

$$\frac{5}{100} = 0.05$$



## Fifth Grade

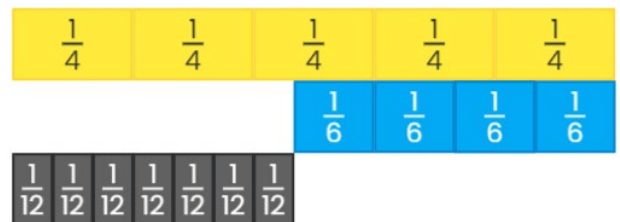
We are learning to add and subtract fractions with unlike, or different, denominators.

At home, use the fraction strips (located on page 5 of this newsletter) to have your child model addition and subtraction problems.

$$\frac{2}{5} + \frac{3}{10} = \frac{7}{10}$$



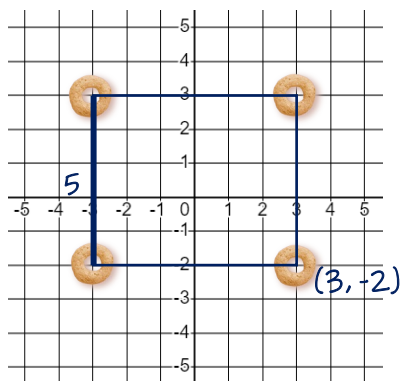
$$\frac{5}{4} - \frac{4}{6} = \frac{7}{12}$$



## Sixth Grade

We are learning about the coordinate plane, how to plot points, reflect points, determine the distance between two points (either with the same x-coordinate or y-coordinate), and find the area and perimeter of a plotted figure on the coordinate plane.

At home, use Cheerios or other cereal as points on a graph.

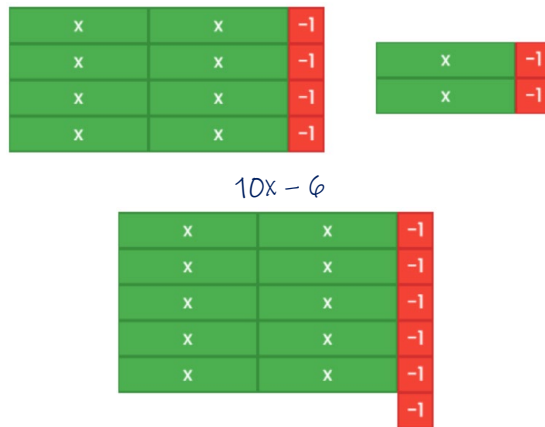


The perimeter is 22.

## Seventh Grade

We are learning to add and subtract linear expressions to find equivalent expressions. Using Algebra Tiles are a great way to show how to combine/remove like terms. This is a foundational skill to solving equations later in this grade and in future courses.

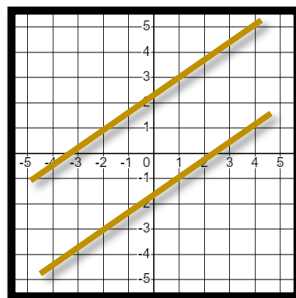
$$(8x - 4) + (2x - 2)$$



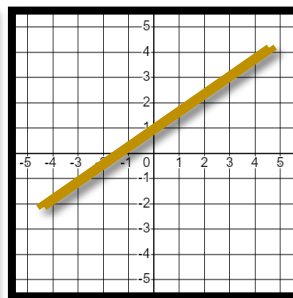
## Eighth Grade

We are learning how to solve systems of equations by graphing.

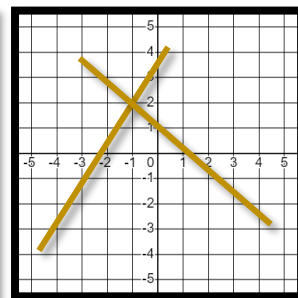
At home, use two pieces of uncooked spaghetti to make a system of equations. Ask your child to state the number of solutions. If one solution, ask them to identify the ordered pair.



No Solution



Infinite Solutions



$(-1, 2)$

## What do I need to know about my child enrolling in a high school credit math course (Algebra 1 & Geometry) in middle school?

- 4 high school credits are needed for graduation. Your child can earn some of these while in middle school.
- If your child passes the EOC, they will meet the math concordant needed for graduation while in middle school.
- The grade your child receives in these courses while in middle school, counts toward their high school GPA.

### FAQ

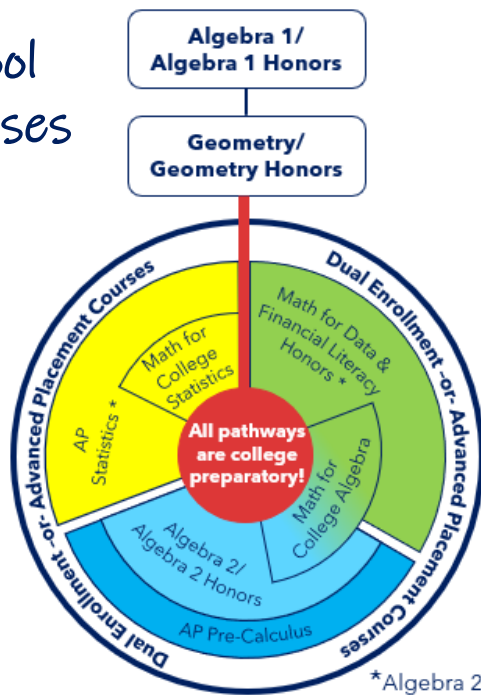
If my child does not take Algebra 1 and/or Geometry in middle school, will they be behind and able to graduation on time?

Students who wait until 9<sup>th</sup> grade to take Algebra 1 will still have plenty of time to earn all 4 high school credits and their concordant. Additionally, they will still have two years to experience upper-level math courses in high school.

How can I help my student be successful in these courses or prepare them to take these courses?

Encourage your child to use Aleks, our district computer adaptive math program, at home. This program targets the unique needs of your child. Also, work with your child to build good work habits, set goals, and manage their time.

# High School Credit Courses



Potential Careers	
Military	<b>Statistics Pathway</b>
	Social Work
	HR Manager
	Medical Technician
	Nurse
	Political Scientist
	Analyst
	Industrial Technology
	GIS
	Merchandising/Marketing Management
	Zoologist/Veterinarian
	Data Scientist
<b>Quantitative Reasoning Pathway</b>	
Animator/Illustrator	
Journalism	
Information Science	
Elementary Education	
Communication	
Culinary Arts	
Automotive Technology	
Design	
Emergency Planning	
Hospitality Management	
History	
Web Developer	
<b>Algebra/STEM Pathway</b>	
Architecture	
Astronomy	
Environmental Science	
Biology	
Business	
Chemistry	
Computer Science	
Economics	
Engineering	
Mathematics	
Physics	
Law	

## High School Math FAQ

What are the high school graduation requirements for a Standard Diploma related to math?

- 4 Mathematics Credits – Algebra 1 and Geometry are Required
- Pass the Algebra 1 EOC State Assessment or a Comparative Score
  - Comparative Scores include: Passing Geometry EOC, 430 on PSAT/NMSQT Math, 420 on SAT Math, or 16 on ACT Math
- Overall 2.0 GPA (2.5 GPA for Florida State University System)

What are the high school graduation requirements for a Scholar Diploma related to math?

- Meet Requirements for a Standard Diploma, plus:
  - Pass the Geometry EOC
  - Earn 1 credit in Algebra 2 or an Algebra 2 equivalent course (MDFL, IB, AP, or DE)
  - Earn 1 credit in AP Statistics or an equally rigorous course (Pre-Calc, Calc)

What is the difference between Regular and Honors for Algebra 1, Geometry, and Algebra 2?

For the most part, Regular and Honors address the same benchmarks. The Honors level however includes additional benchmarks and therefore the course goes at a faster pace.

Do the 3 Math for College Courses count as college credits like Dual Enrollment?

No, these courses are high school level courses that are aligned to courses and pathways that students may take in college. The purpose of these courses is to expose student to mathematics related to a field they may choose.

What is the difference between Advanced Placement and Dual Enrollment?

Advanced Placement are high school courses that teach material ordinarily intended for college students. They may receive college credit if they pass the AP test. For Dual Enrollment, students complete an application to take college credit classes while in high school.

How can I help my child pick a math class that will be meaningful for their career path?

Start having conversations about what they want to do. Use Xello, on our district platform, and the graphic above to explore careers and the mathematics suggested for this career.

My child took Algebra 1 in middle school. Does that mean they can "take a year off" of math?

Yes, however, we recommend students enroll in a math course each year of high school to maintain their mathematical understanding.

# Fraction Strips

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