

LET'S PREVENT SUMMER SLIDE!

Research shows that math skills drop more than any academic skill during the summer, and that middle school math is the most important predictor of success in highschool and entrance to universities. In fact, a strong understanding of fraction operations and whole number division is a better predictor of overall success in high school than any other measure including family income level.

EARN RAFFLE TICKETS AND HOMEWORK PASSES FOR JUST REVIEWING WHAT YOU ALREADY KNOW!

- All students that work on the Summer Assignment will earn a Certificate of Recognition.
- Each student that accomplishes the Summer Assignment will earn a Certificate of Completion and a homework pass that can be used during the second quarter.
- For every 3,000 mastery points earned toward your previous grade level or higher, students will get a raffle ticket and an opportunity to win a Super Math Prize including gift cards and 10 “*first in line tickets*” at the snack bar.

ASF Middle School Math Summer Assignment 2020

Purpose: Practice during the summer material that students should have already mastered the previous year so that they do not lose mastery of these skills. This summer practice is designed to help our students retain their math skills and knowledge so that they can succeed in standardized tests, such as the NWEA, and do well in their math class next school year.

Time Allowance: We suggest that our students spend a minimum of 20 minutes twice per week practicing math skills at their level, however most students will be able to complete this summer assignment in less than 10 minutes per week.

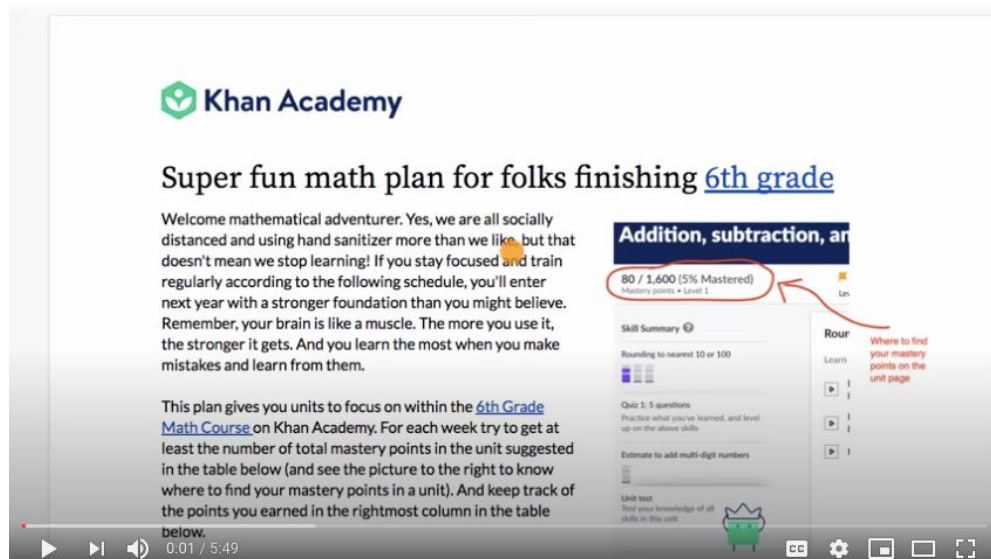
Assignment: The Math Summer Assignments have been created using Khan Academy’s Super Fun Learning Plans for School Closures. We have shortened the amount of time, and selected the most important topics that will lead to your child’s success next year. This resource is free, gives timely feedback and provides students with video and step by step hints explaining concepts they may have forgotten.

Access: Most ASF students already have a Khan Academy account using their ASF email accounts and will log in by selecting *Log In with Google*. It is important that returning students sign up and log in using the ASF user and password, but new students can use their personal accounts over the summer. Students should print the Summer Assignment Table and fill in their course challenge score and the amount of mastery points earned for each section as they work on the assignment over the summer. This will be turned in to their math teacher once they return to school.

How does it work? Students will earn mastery points when they take a quiz, unit test, or course challenge showing understanding of the concepts. For example, on the 6th grade assignment *Subtracting Decimals* a student can answer 6 questions correctly on the first quiz gaining 480 mastery points and then answer 5 questions correctly on the second quiz gaining 320 points which is a total of 800 points. The minimum expectation according to the summer assignment is 700 points. At this time the student can either record 800 mastery points and move to the next assignment the following week, or continue to gain mastery points by taking the unit test on *Subtracting Decimals* and earn up to 1,000 more mastery points. If a student answers the quiz incorrectly, mastery points will not be awarded and practice problems will be suggested. The student should work on the practice problems using hints and video instruction as needed to review the concepts. When done, take the quiz again to gain the mastery points.

Students that have already reached the mastery points goal from previous practice should continue to practice and earn more points. For example, if the goal is 700 points for *fraction addition and subtraction*, and the student already has 800 points, we encourage the student to continue earning points until reaching the goal or the maximum allowed.

For more information on how students will use Khan Academy to accomplish their summer assignment select the video image for the link.



The image is a screenshot of a video player showing a Khan Academy page. The page title is "Super fun math plan for folks finishing 6th grade". The main text on the page reads: "Welcome mathematical adventurer. Yes, we are all socially distanced and using hand sanitizer more than we like, but that doesn't mean we stop learning! If you stay focused and train regularly according to the following schedule, you'll enter next year with a stronger foundation than you might believe. Remember, your brain is like a muscle. The more you use it, the stronger it gets. And you learn the most when you make mistakes and learn from them." Below this, it says: "This plan gives you units to focus on within the 6th Grade Math Course on Khan Academy. For each week try to get at least the number of total mastery points in the unit suggested in the table below (and see the picture to the right to know where to find your mastery points in a unit). And keep track of the points you earned in the rightmost column in the table below." On the right side of the page, there is a sidebar titled "Addition, subtraction, and..." with a progress indicator "80 / 1,600 (5% Mastered)" and "Mastery points • Level 1". Below this is a "Skill Summary" section with a "Round" dropdown menu and a "Learn" button. A red arrow points from the "Learn" button to the "80 / 1,600 (5% Mastered)" text. The video player controls at the bottom show a play button, a progress bar at 0:01 / 5:49, and a small green robot icon.

Summer Assignment for those entering Math 6 (8 weeks ending August 7th)

Week	Ending	Unit to Focus on in 5th grade	Try to get at least this many mastery points in the unit.	How many points did you get that week?
1	June 19	Begin with Course challenge Add decimals	$\frac{\quad}{700}$ %	%
2	Jun 26	Subtract decimals	700	
3	Jul 3	Add and subtract fractions	700	
4	Jul 10	Multi-digit multiplication and division	550	
5	Jul 17	Multiply fractions	650	
6	Jul 24	Divide fractions	650	
7	Jul 31	Multiply decimals	750	
8	Aug 7	Divide decimals End with Course challenge	550 70%	%
If you have more time during any week, work on these units:				
		Coordinate plane	350	
		Algebraic thinking	500	
		Converting units of measure	500	
		Properties of shapes	300	

Summer Assignment for those entering Math 7 (8 weeks ending August 7th)

Week	Ending	Unit to Focus on in 6th grade	Try to get at least this many mastery points in the unit	How many points did you get that week?
1	June 19	Begin with Course challenge Ratios, rates and percentages	___% 800	%
2	Jun 26	Arithmetic operations	800	
3	Jul 3	Arithmetic operations	1550	
4	Jul 10	Negative numbers	700	
5	Jul 17	Negative numbers	1400	
6	Jul 24	Variables and expressions	500	
7	Jul 31	Variables and expressions Equations & inequalities introduction	1050 500	
8	Aug 7	Equations & inequalities introduction End with Course challenge	1000 70%	%
If you have more time during any week, work on these units:				
		Properties of numbers	300	
		Geometry	1500	
		Data and statistics	1500	

Summer Assignment for those entering Math 8 or Math MYP 3 (8 weeks ending August 7th)

Week	Ending	Unit to Focus on in 7th grade	Try to get at least this many mastery points in the unit	How many points did you get that week?
1	June 19	Begin with Course challenge Negative numbers: addition and subtraction	<u> </u> % 500	%
2	Jun 26	Negative numbers: addition and subtraction	1000	
3	Jul 3	Negative numbers: multiplication and division	300	
4	Jul 10	Negative numbers: multiplication and division	600	
5	Jul 17	Fractions, decimals, and percentages	300	
6	Jul 24	Rates & proportional relationships	600	
7	Jul 31	Expressions, equations, & inequalities	400	
8	Aug 7	Expressions, equations, & inequalities End with Course challenge	800 70%	%
If you have more time during any week, work on these units:				
		Geometry	2000	
		Statistics and probability	750	

Summer Assignment for those entering Algebra 1 or Math MYP 4 (8 weeks ending August 7th)

Week	Ending	Unit to Focus on in 8th grade	Try to get at least this many mastery points in the unit	How many points did you get that week?
1	June 19	Begin with Course challenge Numbers and operations	<u> </u> % 700	%
2	Jun 26	Numbers and operations	1400	
3	Jul 3	Numbers and operations	2100	
4	Jul 10	Solving equations with one unknown	500	
5	Jul 17	Linear equations and functions	300	
6	Jul 24	Linear equations and functions	1100	
7	Jul 31	Linear equations and functions	1900	
8	Aug 7	Systems of equations End with Course challenge	500 70%	%
If you have more time during any week, work on these units:				
		Geometry	850	
		Geometric transformations	800	
		Data and modeling	900	