

Highly Gifted Math

Frequently Asked Questions

Highly Gifted Math is a new course pathway Pearland ISD Advanced Academics is piloting at one school during the 2019-2020 school year. In order to be consistent with our message to parents so that everyone receives the same information, a few of the most frequently asked questions and responses are included in this document.

To be eligible for the Highly Gifted Math pilot program, your student must be entering the 5th grade in the fall of 2019 at Sablatura Middle School. The first criteria for consideration into Highly Gifted Math 5 is mastery level on the 4th grade STAAR Math exam. This criterion is absolute and non-negotiable.

- Does the GT incoming 5th grader need to be tested over the summer to qualify for the advanced math path? If yes, where do I sign her up?
Students entering 5th grade next year simply request Advanced Math. Enrollment in Advanced Math 5 is open to all students.

Only students who mastered STAAR and wish to test for the new course, Highly Gifted Math 5, need additional assessment. This year testing will be in the summer on July 22, August 5 and August 7 at ESC. Next school year, testing will be done prior to the last day of school.

- How about the 5th advanced mathematics program? Do we need to enroll ahead of time? Or will all the GT academy students be automatically placed in the advanced program? What about the other schools?
All students in Pearland ISD have the choice of taking Math 5 or Advanced Math 5. Advanced Math 5 is open to all students.
- My son is entering the 5th grade at GT academy this fall. I got an e-mail regarding the mathematics sequence at GT Academy. It mentioned 5th grade advanced mathematics and highly gifted math programs. Per the letter, highly gifted math program has qualification requirements and grade requirements.

All Gifted students entering 5th grade at the GT Academy will automatically be enrolled in Advanced Math 5 which enables students to take Algebra 1 in 8th grade. About 10% of our total student body will take Pre-AP Geometry and Pre-AP Algebra 2 concurrently in 9th grade. The new course, Highly Gifted Math has strict qualification requirements. It is very fast paced, and students will cover six or seven school years of math in four years. An outline of the course sequence is included at the end of this document.

- Why is the district offering this class?
This class has been considered for about four years. The new State Plan for the Education of Gifted and Talented Students requires that school districts identify and provide services for highly, exceptionally, and profoundly gifted students. Because of the new state plan, we are able to move forward with this new course. This will be the first program especially for highly gifted. Additional courses are under consideration.
- My daughter was administered the CoGAT in 2nd grade, but only percentages were provided. I was told at that time the standard age score could not be provided. Now that the department

is requiring this, can those scores be made available? Is the test from 2nd grade recent enough?

If we have qualifying scores already on file for a student, that student will not be required to retest in that area. We are somewhat dependent on another department for the format and how scores are received, so we have the means to conduct additional assessment.

- What does "writing and economic process" mean? Does this mean explaining the reasoning concisely or explaining a concept from economics?

Students can practice "articulating an economic process". This is the language we use to ask highly capable math students to show their work and explain (in writing) the process they use to find the answer. For example, when presented with a long division problem, the student should be able to explain how she got the answer. If a student has an inefficient means of deriving an answer, it is important to take time to explain a better method.

Some gifted students have a sense of developmental math theory and can provide an answer immediately because they have a high ability to reason and think quickly. For example, if you ask a Gifted 6 year old to divide 96 by 12, he might immediately say 12 or 14 because it makes sense, but has no real idea how, and will tell you he just "knows".

- Why is the standard age score (SAS) set so high (145)?
This course is for students who are highly or exceptionally gifted in math. They probably love math, they show an innate sense of developmental math theory at an early age, and solve math puzzles just for fun. Because there it is difficult to measure

- What is a "creative thinking performance task"? Do the ones administered in 2nd grade still apply? Is this a multiple choice test? I'm not able to connect games with math. Please explain.

A creative thinking performance task will engage the student in mathematical thinking. Computational thinking can be developed through games and puzzles which often involve multiple steps, the ability to recognize, replicate and create patterns, understanding sequences, deductive reasoning, logical thinking and planning ahead. Some fun games are chess, Go, Connect 4, Clue and many card games are some old standards. Most stores have games and puzzles that promote STEM so they are easy to find.

Students who are highly gifted in mathematics exhibit developmental math theory at an early age. They are able to recognize, replicate, and create patterns and sequences. They quite often excel in games of strategy, cause and effect, creative problem solving and forced relationships. By adding this component to the Highly Gifted math identification, it is hoped that students who may not typically score high on standardized tests will be able to qualify for the course.

- My daughter took an achievement test online and scored 99%. Will this count?
If you would like for your child to practice, an online assessment may be an option, however, it will not count for the district assessments.

- My child attended an out of state school or private school and did not take the STAAR test. Is there any way she can qualify for the HGM program?
Yes, although the STAAR gives us good information based on state standards and is required for Texas public school students, we do not wish to exclude students who may be highly qualified for the course. Some state tests and nationally normed assessments may be used. The student will need to meet multiple criteria. Please send all relevant data to Advanced Academics for committee review.
- Will there be a process for a child to test into the program in 6th grade? If, for example, they meet one of the 4 non-STAAR criteria this year - and exhibit STAAR mastery next year - and then take a CBE to test out of 6th grade math following the 5th grade year?
Yes, students will be able to test in in 6th grade.
- What is the minimum number of children who will need to meet the criteria for the path to be put into place next year?
The minimum number of students required for the class to “make” is 20.
- It looks as if 2 of the 4 criteria that need to be met require mastery of 5th grade math. This is despite the pathway stating that both 5th and 6th grade TEKS would be taught in 5th grade.
That is correct. According to Dr. Sally Reis who coordinates the National Research Center for Gifted Children at the University of Connecticut, Gifted children typically know 80% of the regular grade level curriculum on the first day of school. This course is not for Gifted, but for Highly Gifted and they are expected to do well on a 5th grade standards
- If my child has already met the score criteria on other tests, does she have to test again?
No. We have an internal database and will check scores. If a student has met all or part of the criteria, you will be contacted with information about specific times for assessment based on individual needs.
- If my child qualifies for the HGM class, will he only be able to stay on this path if he attends PJH West for 7th and 8th grade? Could this class be offered at his attendance zone school?
At this time we do not anticipate having enough students qualify to offer the HGM course at multiple campuses. The minimum number of students required for the class to “make” is 20. The projected number of qualifiers is 20-40. As students complete coursework, they will enroll in the next articulated course in math.
- If my son qualifies for HGM 5, but I change my mind and withdraw him from the program, can he re-enter the program at a later date?
Students who withdraw from the Highly Gifted Math program for any reason must re-qualify prior to entering the program the next school year. Students who withdraw for any reason cannot re-enter the program that same school year, but must wait until requalifying for the next school year.

If you think of any additional questions, please send them to Margo Gigeem at gigeem@pearlandisd.org as soon as possible so that I can include them in the document for all parents of students who meet the STAAR minimum requirement.

Resources

Davidson Institute
National Research Center on Gifted Children