

***Accelerated Math in the Elementary Schools***

***and***

***Honors Algebra I Core Curriculum***

**Committee**

Terri Costenbader Allentown Central High School

Kathy Moult Berks Catholic High School

Carrie Saul Bethlehem Catholic High School

Linda Snyder Marian Catholic High School

Lynn Sabol Nativity High School

Rose Ann Mintzer Notre Dame High School

Sister Anita P. Gallagher, IHM Diocesan Office



***ACCELERATED MATH IN THE ELEMENTARY SCHOOL***

***IN THE DIOCESE OF ALLENTOWN***

**Overview**

The mathematics curriculum for the schools of the Diocese of Allentown has been carefully developed to reflect the **Principles and Standards for School Mathematics** established by the National Council of Teachers of Mathematics.

The Honors Algebra I curriculum and assessment is standard in order that that the elementary schools can better instruct and prepare students for the high school math curriculum.

 **Care has to be taken that students being instructed in the Honors Algebra I program in the elementary school would have adequately completed all levels of mathematics prior to beginning the Honors Algebra course and that they would have adequate time to complete the program in eighth grade.**

**Accelerated Math Program**

**An officially recognized Accelerated Math program meets the following criteria**

1. Students meet the criteria for admission to the program;
2. The pacing of the program is in keeping with those suggested in these

 Guidelines;

1. Students are being given adequate mathematics instructional time.
2. Honors Algebra I is completed at the conclusion of the program and students

 take the standardized Honors Algebra I end-of-course test approved by the Office of Education.

Those programs which do not meet the criteria set forth for Honors Algebra I in these guidelines are considered **enrichment** programs rather Honors Algebra Programs.

**Criteria for Admission**

**General Recommendations**

 **Fourth and fifth grade Math marks should be considered for admission to this program.**

Students being admitted to the Elementary Accelerated Math Program should meet the following criteria:

1. Consistent scores at or above 8th stanine in **Math Scores** for the **Iowa Tests** in **Mathematic, Computation, and the Math Total** (National Percentiles used.)
2. Evidence of above average performances on Mathematics Level Mastery Tests. Students admitted from other

programs/schools should be tested using back copies of the level tests. “above average performance”

 is interpreted as a score of **90 or above**.

1. Consistent grades of **90 or above** in Mathematics on the **report card**.
2. **CoGat scores in 3rd and 5th grade** in the **non-verbal** and **quantitative scores** **should be reviewed.**
3. **Recommendation of Mathematics Teacher**.
4. **Fluency and automaticity in all areas of appropriate computation.**

**Continuation in the Accelerated Math Program is based on meeting the above criteria annually.**

**Identification of Students for Accelerated Math**

Students are identified as potential candidates for Accelerated Math at the end of grade 4 or 5. The program is begun at grade 5 or 6 (depending on circumstances in the individual school) to insure that the students have had a sufficient amount of time to master the skills necessary to complete the **Honors Algebra I** course in the eighth grade.

**CURRICULUM**

**The Approved Diocesan Math Curriculum** takes into consideration the recommendations made by the National Council of Teachers of Mathematics as well as the recommendations of the Department of Education of the State of Pennsylvania.

* Students are taught to reason and communicate mathematically, to use concrete and technological aids in developing mathematical reasoning skills and to integrate mathematics skills with those of other curricular areas and with real life situations.

**The Curriculum used for the Elementary Accelerated Math Program** is not a separate curriculum other than that which is used for Mathematics instruction in the elementary school of the Diocese of Allentown.

The plan of the program is to provide for a vertical progression of skills following an accelerated pace.

Students are required to master the Diocese of Allentown curriculum topics, such as problem solving, fractions, decimals percentages and Pre-Algebra etc. and move at a faster pace into the Algebra I curriculum in 8th grade.

**The Honors Algebra I Curriculum** developed for use in the Elementary Accelerated Math Program is consistent with the curriculum in use in the secondary schools of the diocese. Students unable to complete a full year of **Honors Algebra I** at the elementary level are admitted to a course designed to meet the needs of these students.

Monitoring of the program is essential to insure that the students have followed an adequately thorough program.

**Scheduling**

* Two or more math classes
* Separate math personnel
* One class of each grade that is self-contained-grouping or separate math personnel
* Students are not to be expected to complete a level of Math on their own over the summer.

**If you do not have an Accelerated Math Program in place and would like to establish one or if you would like to improve your accelerated math program please contact Sr. Anita** **agallagher@allentowndiocese.org** **for more information.**

**Communication**

Good communication is essential to the success of the program:

A Parent Information session should be held at the program’s inception in the school and thereafter, periodically, to increase parents’ awareness of the program specifics.

Frequent communication between parents and teachers should be maintained throughout the program, and especially when there is a concern related to the child’s placement in the program.

***The high schools are responsible for testing eighth grade Honors Algebra 1 students for high school placement.  The Diocese has developed and approved the standardized test that will be used for this purpose.***



***“The laws of nature are but the mathematical thoughts of God” - Euclid***