

K - 12 Math Issues

January 31, 1999

Questions Related to the Elementary Level

- 1. What training is needed and is being provided to teachers to make them better able to teach elementary math?**
 - a. Math Content?**
 - b. Specific Programs?**
 - c. Understanding and measuring adopted Performance Standards?**

Many elementary teachers studied mathematics as a series of unrelated skills. As a result, these teachers' understanding of the inter-relatedness of mathematical concepts may be limited. Many teachers are frequently not comfortable with teaching in a conceptual framework because that is not how they learned mathematics and they lack the conceptual understanding themselves. All teachers need a mathematics background significantly more advanced than the level at which they teach and many do not have that. For example, if a student gets a wrong answer, the skill oriented teacher can re-teach the skill. The teacher with conceptual understanding will know what is missing and fill in the knowledge gap. The Math Department needs the opportunity to provide in-service training and additional classes in conceptual mathematics as well as the use of concrete materials to facilitate student learning. Through such training activities, teachers will increase their understanding of and become more comfortable with the conceptual understanding of mathematics. The difficulty is in reaching all teachers, not just those able and willing to take credit classes after hours or during the summer.

The District offers mathematics credit classes in both content and process for elementary teachers. In addition, Math Department staff have offered to work in any school, with individual teachers or with the entire staff, providing training on team teaching, peer coaching, and lesson, program, or content support.

Training was identified as a need related to elementary mathematics through a survey of all elementary teachers, all elementary principals, and all middle school mathematics teachers conducted in late Spring 1999. This survey was conducted by the Assessment and Evaluation Department at the behest of the Superintendent to ascertain the attitudes of staff toward the elementary mathematics program. The general conclusion from that report states

A general conclusion might be that overall things are good, but many feel that things could be better. To quote from a teacher, "The EveryDay Math program is hard for teachers but good for students." However, there are real concerns about the "gaps" in the education of students that do not have consistent instruction in the program as they move through the grades or come new to the Anchorage School

District. New students and lower ability students appear to struggle to master the concepts and catch up with average and continuing students. Teachers are generally positive about the other programs in use in the district but almost all teachers and principals feel that there is a need for more training and support.

The complete report from that survey is provided as Attachment B to the Board Memorandum.

a) Math Content?

Several times each year and at the summer academies, the Math Department offers a variety of classes in math content and pedagogy for elementary teachers. The classes either focus on Everyday Math and the concepts used therein, or on the math content and performance standards.

b) Specific Programs?

The Department has also offered classes in "Algebra For Everyone," "Everyday Math," "Geometer's Sketchpad," "Connecting Middle Grades Math," "Math Strands," "Teaching Standards Based Math," "Using Cooperative Learning in the Elementary Math Classroom," and the "Alaska Math Consortium Basic Institute." Through Portland State University, the Math Department has also offered a series of "Visual Math" classes.

c) Understanding and measuring adopted Performance Standards?

All elementary teachers were familiarized with the Anchorage School District Mathematics Performance Standards and provided training on how to design standards based lessons during the August 1999 Cross District In-service Day. The Standards are also tied into every math class or training program offered in the District. Additionally, school level training activities have focused on standards implementation during this school year. Developing an understanding of standards, standards based education, and measurement of performance related to standards is an on-going training need being addressed at all levels and disciplines across the District.

2. How can parents know what is happening in their students' math education? How can they help?

- a. Do work pages, work books, or texts with problems go home?**
- b. Is the Everyday Math Parent Handbook (locally developed) usable by parents?**

The following are some suggestions that will enable parents to share in their child's experiences in learning mathematics. Following the suggestions may help to create an environment in the home that provides encouragement for their child.

- Ask your child to explain the concepts and relationships he/she is studying. Be concerned with the process as well as the end result. Explaining thoughts often helps children to clarify their thinking and their understanding.
- When your child has a question, try not to tell him/her how to solve the problem. Rather, ask questions that will help the child to think about the problem in a different way, thus helping the child to reach a solution.
- Encourage your child to draw diagrams, models, or sketches to help understand or explain a concept or problem.
- Provide a special time and place for study that will not be disrupted by other household activities.
- Play math games with your child. Some appropriate grade level games are available from your child's teacher. You might also ask your child to teach you a game that he/she learned at school.
- Show interest in your child's experiences in math class. Ask the child to tell about his/her class activities.
- Encourage your child to form study groups with other classmates to work on assignments. By discussing their views and approaches, students provide each other with rich insights about problems and concepts.
- Engage your child in home activities that use a variety of mathematical skills. Encourage your child to use appropriate games and puzzles, to make estimations and to talk about math ideas at mealtime, while traveling, while shopping, etc.
- Make triangle (fact) flash cards with your child and encourage him/her to memorize the facts. **It is important that your child has mastered basic addition/subtraction facts by the end of second grade and basic multiplication/division facts by the end of fourth grade.**
- Take advantage of opportunities to visit your child's math class.

The suggestions presented above were extracted directly from the "Everyday Math Parent Resource Manual" developed by the District's Math Department staff.

a) Do work pages, workbooks, or texts with problems go home?

Yes. The amount and variety is dependent upon each classroom teacher.

b) Is the "Everyday Math Parent Handbook" (locally developed) usable by parents?

Yes. The "Everyday Math Parent Resource Manual" was designed specifically to provide a link between parents and the Everyday Math program. It provides information on the overall program, games, procedures, routines, vocabulary, algorithms, and philosophy of the program and contains an extensive glossary. The manual is designed to be used as a parent reference, in conjunction with input from and interaction with the student. It is not a textbook, nor should it be used alone. Staff have had excellent feedback as to its

usefulness from both parents and teachers. However, to ensure the "friendliness" of the manual, Math Department staff will invite the PTA to identify a subcommittee to review the manual and offer suggestions to improve user friendliness in future printings.

3. How do we develop within teachers the sense of "mathematical urgency" to insure that students are ready for pre-algebra or algebra as they move into middle school?

This is a difficult question to answer as long as it is acceptable to "hate math." Math is an emotional subject for many teachers who only learned skills and not how to use them. When a teacher is out of the comfort zone, the teacher is not likely to encourage students to go where the teacher lacks confidence. The teachers' level of conceptual understanding needs to be increased so that teachers can comfortably and confidently encourage students to push beyond the limits of their understanding, knowing where the student is and where the student needs to be challenged. This is particularly important with students who are "ahead of the learning curve" and need the challenge of higher level thinking within the structure of their existing program.

4. Is the Pre-Algebra test, given at the end of sixth grade, appropriate?

Yes. In addition to basic skills, it tests students' ability to use those skills to solve problems. It also assesses the other math strands; patterns, functions, and geometry; for concepts that must be in place for a student to achieve success in Pre Algebra. In combination with norm referenced test results, teacher recommendations, and parent requests, the test provides useful information for placing students in middle school. It is the opinion of the Middle School Math Chairs that since going to a district procedure for placing seventh grade students in math, the placement process has become more consistent and equitable for all students. This issue will also be discussed under the middle school section of this document.

5. Are elementary building principals aware of the criterion for the referral of students to pre-Algebra /Algebra?

Elementary principals are certainly aware of the sixth grade test and the California Achievement Test. It is not clear if they are aware of the specifics of the recommendation process. The Math Department will work with the Elementary Education Department and the Middle School Education Department to provide information to all principals to insure a reasonable understanding of the placement process.

Questions Related to the Middle School Level

1. How are students placed in various types of math classes at the middle school level? Is the available assessment information, teacher recommendations, parent interests, etc. suitable for proper placement?

California Achievement Test scores, the ASD Screening Test, teacher recommendations, and parent requests are all factored into the placement process. Table 1 identifies the enrollments in various types of mathematics classes for students in grade 7 in Fall 1998, broken down by their performance on the ASD Screening Test. The summary aggregates enrollments across the nine regular middle schools in the District.

The data in Table 1 indicate that the screening test is not the sole determinant in the placement of students in mathematics classes in grade 7. It further indicates that there are seventh grade students enrolling in Algebra as well as Pre Algebra and Math 7 or 8. Finally, by following the "Math 7 or 8" and the "Pre-Algebra" lines across, it is clear that there is a positive relationship between student performances on the ASD Screening Test and student performances in their classes.

Table 2 provides a breakdown of seventh grade mathematics enrollment in the fall for each of the past three school years aggregated across the nine regular middle schools. This table shows that while most students are in the expected Math 7 course, there are and have been students enrolled in grade 7 in both Pre Algebra and Algebra. The data indicate there has been a slight movement toward Pre Algebra from Math 7 over the past couple of years.

Table 1
Grade 7 Math Enrollments by Performance on the ASD Screening Test
Fall 1998 Nine Regular Middle Schools

	No Test	Not	Border			
<u>Class Type</u>	<u>Data Type</u>	<u>Data</u>	<u>Recommended</u>	<u>Line</u>	<u>Recommended</u>	<u>Total</u>
Special Ed	Number	62	104	1	0	167
	% A or B	42%	47%	100%	--	46%
Math 7 or 8	Number	450	1,691	256	81	2,478
	% A or B	36%	40%	59%	67%	42%
Math 7 or 8	Number	10	3	24	145	182
Gifted	% A or B	100%	100%	75%	86%	86%
Pre Algebra	Number	65	105	213	362	745
	% A or B	68%	58%	68%	71%	68%
Algebra or	Number	4	2	4	49	59
Above	% A or B	50%	50%	75%	65%	64%

Table 2
Seventh Grade Math Enrollments by
Type of Math Course
Fall 1997, Fall 1998, and Fall 1999

Course		Fall	Fall	Fall
<u>Type</u>	<u>Data Type</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
Spec Ed	Number	150	167	163
	Percent	4%	5%	5%
Math 7 or 8	Number	2,413	2,478	2,273
	Percent	67%	68%	64%
Math 7 or 8 Gifted	Number	252	182	190
	Percent	7%	5%	5%
Pre Algebra	Number	719	745	884
	Percent	20%	21%	25%
Algebra	Number	61	59	51
	Percent	2%	2%	1%
Geometry	Number	0	0	4
	<u>Percent</u>	<u>0%</u>	<u>0%</u>	<u><1%</u>
Total	Number	3,595	3,631	3565
	Percent	100%	100%	100%

The ASD Screening Test has been in use for the past two years giving middle school math teachers two years to evaluate the placement system for incoming seventh grade students. Based on the observations from these two years, the Math Curriculum Committee has recommended that students score at least at the 85th percentile on each sub-test of the CAT (formerly we used the 85th percentile overall), and a score of at least 27 on the ASD screening test. A teacher recommendation and a parent recommendation are also part of the recommendation matrix. Anecdotal information suggests that students who have met the test criteria have generally been successful in Pre Algebra. Students who have met the criteria on at least one test and have a teacher recommendation have been somewhat successful in Pre Algebra. Students who have not met the criteria on either test and are placed in Pre Algebra based only on recommendations have generally been unsuccessful in Pre Algebra.

2. What training has or will be provided to principals, teachers, and counselors to try to move students into the most rigorous math possible to get students through algebra when they are academically capable, even if it is a challenge?

The Math Curriculum Committee strongly recommends that all principals, teachers, and especially counselors be made familiar with the criteria used for placement of students in appropriate mathematics classes.

The committee recommends that we strongly encourage students to take the **most advanced math course for which they qualify**. The committee also expressed concern that pushing students into classes before they are ready is a setup for failure. Although there are school systems where all middle school students take a class with "algebra" in the title, these courses are not all equivalent to high school Algebra I, and the students do not receive high school credit for these classes. The focus of the ASD Math 8 textbook, Middle Grades Math Course 3, is **algebraic** thinking, whereas the Math 7 book focuses on proportional thinking. All students who have passed Math 8 have received a significant amount of preparation in beginning algebra prior to attempting an Algebra I course.

Specific training and strategies will be developed over the next year as Clark implements a program, funded through a grant, to provide rigorous, advanced mathematics courses to students who seem to have the ability but may need more than the usual assistance and guidance to succeed. Insight into specific strategies and actions may be attained over this next year.

3. Should the middle school algebra and geometry courses be using the same texts as the equivalent high school courses? If not, how is the equivalency of content, concept development, and skill development assured?

The Secondary Math Curriculum Committee (Department Chairs from all middle and high schools) was unanimous in recommending that the middle schools use the same

books as the high schools for high school level classes. Last year during the algebra textbook adoption, the middle school teachers had the opportunity to select their books. Unanimously, they selected the same books as the senior high school teachers (and the community members). Middle School teachers chose to prepare their students to compete as equals with students who receive their algebra training at the high school. All students should be on an equal footing in order to be successful in Algebra II. A less rigorous Algebra I training in middle school will disadvantage those students who take algebra at that level and wish to go on to additional mathematics classes at high school.

While the present text in use for Algebra in the District is acceptable at both levels, the question is still open. There is no question that the mathematics content and conceptual development needs to be similar at both the middle school and high school levels for the same courses. Use of the same book would seem to reinforce that expectation. However, texts may be designed to cover the same materials and conceptual skills while appealing to different aged levels of students. This question will continue to be an issue in future when new adoptions come forward.

Questions Related to the High School Level

- 1. How does a student get credit in high school for Algebra and/or Geometry taken in middle school? What is the basis for this granting of credit?**

Students must apply for credit. This is done through the "credit-by-choice" process currently in place at the high schools. According to the approved process, a student must have a "C or better" to receive credit for a course.

This practice originated about two years ago as the new high school graduation requirements were implemented. The intent is to provide students more options in meeting the credit requirements, while still providing credit for courses typically taken at high school.

- 2. What is the history for students who have taken Algebra and/or Geometry in middle school? Have they gone on to higher levels of math in high school? How have they performed?**

The unanimous comment from the Senior High department chairs was that students who had their geometry (and therefore algebra) at the middle school were weaker in algebra (in the Algebra II class) than those who were prepared by the high school teachers. Because these students are supposed to be ahead on the learning curve, they can usually make up the difference without too much difficulty, but the observation is that they have not had the same rigorous preparation as students prepared at the high schools.

The Secondary Math Committee expressed concern that an increase in the number of students taking less rigorous algebra and geometry courses in middle school will increase

the number of high school failures, and produce more students who take a minimum number of (or no) math credits in high school.

The concerns of the department chairs may be overstated. Tables 3 and 4 present high school math course enrollment for four years for students who were in grade 8 in 1994-95. Table 3 presents information for students who had not taken Algebra in middle school while Table 4 presents information for students who had taken Algebra in middle school. These tables seem to indicate that students who took Algebra in middle school are succeeding in math courses in high school at least as well as those students who did not take the course in middle school.

Table 3

History of Math Courses Taken in High School

Students in Grade 8 in 1994-95

Did Not Take Algebra in Middle School

	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>
Special Ed.				
Credits Attempted	107.00	87.50	41.50	13.5
Credits Earned	94.00	70.00	31.00	9.00
Percent of Credits Earned	88%	80%	75%	67%
Math Skills Type				
Credits Attempted	98.00	56.75	39.25	23.25
Credits Earned	82.00	36.00	29.75	18.25
Percent of Credits Earned	84%	63%	76%	78%
Pre-Algebra				
Credits Attempted	882.00	243.50	35.50	8.5
Credits Earned	682.00	141.50	16.00	5.5
Percent of Credits Earned	77%	58%	45%	65%
Survey of Algebra				
Credits Attempted	77.25	200.50	77.00	22.5
Credits Earned	74.75	162.50	52.00	15.5

	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>
Percent of Credits Earned	97%	81%	68%	69%
Algebra A/B				
Credits Attempted	0	0	18.00	15.00
Credits Earned	0	0	10.00	7.50
Percent of Credits Earned	--	--	56%	50%
Algebra I				
Credits Attempted	800.75	580.25	199.50	42.50
Credits Earned	699.50	446.75	144.25	29.50
Percent of Credits Earned	87%	77%	72%	69%
Informal Geometry				
Credits Attempted	0.00	29.50	101.00	22
Credits Earned	0.00	29.00	89.00	16
Percent of Credits Earned	--	98%	88%	73%
Geometry				
Credits Attempted	132.00	521.00	284.75	102
Credits Earned	129.50	480.50	223.00	80.25
Percent of Credits Earned	98%	92%	78%	79%
Algebra II				
Credits Attempted	0	146.25	353.75	152.75
Credits Earned	0	141.00	314.75	126
Percent of Credits Earned	--	96%	89%	82%
Analysis/Trig/Etc.				
Credits Attempted	0.50	1.50	121.00	156.25
Credits Earned	0.50	1.50	117.00	146
Percent of Credits Earned	100%	100%	97%	93%
AP Statistics				
Credits Attempted	0	0	0	12

	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>
Credits Earned	0	0	0	12
Percent of Credits Earned	--	--	--	100%
Calculus				
Credits Attempted	0	0	2.00	96.25
Credits Earned	0	0	2.00	92.25
Percent of Credits Earned	--	--	100%	96%
No Math	108	103	352	729

Table 4

History of Math Courses Taken in High School

Students in Grade 8 in 1994-95

Took Algebra in Middle School

	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>
Special Ed.				
Credits Attempted	0.00	0.00	0.00	0.00
Credits Earned	0.00	0.00	0.00	0.00
Percent of Credits Earned	--	--	--	--
Math Skills Type				
Credits Attempted	0.50	9.25	2.00	5.50
Credits Earned	0.50	8.25	1.50	5.50
Percent of Credits Earned	100%	89%	75%	100%
Pre-Algebra				
Credits Attempted	33.50	4.00	0.00	0.50
Credits Earned	31.00	3.00	0.00	0.50
Percent of Credits Earned	93%	75%	--	100%
Survey of Algebra				

	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>
Credits Attempted	1.75	3.50	4.50	1.50
Credits Earned	1.75	2.50	3.50	1.50
Percent of Credits Earned	100%	71%	78%	100%
Algebra A/B				
Credits Attempted	0.00	0.00	0.00	0.50
Credits Earned	0.00	0.00	0.00	0.50
Percent of Credits Earned	--	--	--	100%
Algebra I				
Credits Attempted	272.25	56.00	8.50	1.00
Credits Earned	245.75	43.50	5.00	1.00
Percent of Credits Earned	90%	78%	59%	100%
Informal Geometry				
Credits Attempted	0.00	3.50	10.50	0.50
Credits Earned	0.00	3.00	8.50	0.50
Percent of Credits Earned	--	86%	81%	100%
Geometry				
Credits Attempted	328.00	212.50	35.50	7.50
Credits Earned	318.50	192.00	24.75	6.00
Percent of Credits Earned	97%	90%	70%	80%
Algebra II				
Credits Attempted	19.00	282.50	177.50	32.50
Credits Earned	19.00	272.25	155.25	25.00
Percent of Credits Earned	100%	96%	87%	77%
Analysis/Trig/Etc.				
Credits Attempted	3.00	18.50	202.75	92.50
Credits Earned	3.00	18.00	197.50	86.00
Percent of Credits Earned	100%	97%	97%	93%

	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>
AP Statistics				
Credits Attempted	0.00	0.00	2.50	9.00
Credits Earned	0.00	0.00	2.50	8.50
Percent of Credits Earned	--	--	100%	94%
Calculus				
Credits Attempted	4.50	5.00	22.75	134.50
Credits Earned	4.50	5.00	21.00	128.50
Percent of Credits Earned	100%	100%	92%	96%
No Math	16	20	88	234

3. Should the required number of math credits for graduation remain at 2.5, should they be decreased back to 2.0, or should they be increased to 3.0 or more?

This is a very controversial issue. The 2.5 credit requirement is not very coherent with the math courses offered at high school. Most of the courses offered are year long courses, and the 2.5 credit requirement may suggest to some students that they leave a course at mid-year, thereby not profiting from the year long sequence.

Most of the Math Department Chairs would like to have students take three or more years of math, but they recognize that this would negatively impact the lower level students who are already doing all they can to get through the program. On the other hand, with a 2.0 credit requirement, students could meet their requirement in middle school and take no math in high school.

When considering the issue, areas outside mathematics should also be considered. Every increase in specific requirements for graduation removes an option for students to take electives such as music, art, career technology, or world languages. These areas are already being pushed to provide a comprehensive program due to lowered enrollments. Increasing the math requirement might exacerbate that situation.

The recommendation of the curriculum committee is that the requirement should be two credits of math earned **during high school (beginning at ninth grade), and meet the algebra requirement**. In this way, students could still choose to receive "credit" for math courses at middle school, and that would count toward meeting the 22.5 credit requirement, but would not satisfy the math requirement without taking at least two more credits in high school. Lower level students would not be negatively impacted by having

to meet yet another requirement, and students who are ahead of the curve would be encouraged to continue their math education. All students will profit from at least two credits of math in high school, and although the math community would prefer students to take 4 years of math, it fully recognizes that is not realistic for **all** students.

4. What about "Survey of Algebra?" Should it continue to be accepted as meeting the algebra requirement for high school graduation?

This topic is currently under review. A specific recommendation in this area will be presented to the School Board for action in February.

5. What do we have in place for juniors and seniors who are struggling with math and/or have failed to pass the math portion of the High School Graduation Qualifying Examination?

There is a significant amount of Algebra on the "Exit" test, and Algebra is a graduation requirement for ASD students. It is the recommendation of the Math Curriculum Committee that no remedial courses related to the high school examination be provided to students unless or until they have satisfied the Algebra requirement. The Committee further recommends that students should have also taken a geometry class prior to moving to a remedial class. The belief is that students who have taken **at least** an algebra and a geometry course will most likely be successful on the exit test. If a student is not successful on the exit test and has not yet taken algebra and geometry, the recommendation is that the student continue with the normally recommended program sequence.

For the student who has passed algebra and geometry, but not the test, the Math Department is designing a class that will *review* algebra, geometry, probability, statistics, discrete math, measurement, and numeration (the math strands covered on the test). This class presumes that the student will have already taken an Algebra and preferably a Geometry class, and it will review and synthesize the information. The class is not intended to be an introductory class, as it would not be possible to cover the necessary volume of material in the allotted time.

6. What kinds of math have our recent graduates taken through high school?

Students who have recently completed four years of high school in Anchorage have, on average, earned just over three credits of mathematics during their normal school time. Work during the summer or through credit by choice may have increased this amount.

Students who were in twelfth grade in 1998-99 and who were in Anchorage for their entire high school careers earned an average of 3.02 mathematics credits. Students who were in twelfth grade in 1997-98 and were in Anchorage for their entire high school careers earned an average of 3.09 mathematics credits. Both of these groups were faced

with high school graduation requirements demanding 2.0 credits of mathematics at any level.

Table 5 presents the "highest" level of mathematics class taken and passed by the students who were seniors in 1998-99 and in 1997-98. The assumed level of difficulty of the courses for the purposes of this analysis is as shown in Table 5.

Better than 73 percent of the 1998-99 group and better than 75 percent of the 1997-98 group had successfully completed Geometry or better. Almost 90 percent of each group had completed Algebra by the time they left high school. It appears that the "algebra" requirement for graduation was already being met by the vast majority of students who spent their high school careers with us here in Anchorage, even before it became a requirement for graduation.

Table 5
Frequency of Highest Mathematics Course Taken
and Passed in High School
Students Who Were Seniors in 1998-99 and
Students Who Were Seniors in 1997-98

<u>Course Number</u>	<u>Course</u>	<u>1998-99</u>	<u>1997-98</u>
1708	AP Calculus C	12	16
1707	AP Calculus 2	240	197
1706	AP Calculus 1	35	42
1702	AP Statistics 2	5	2
1701	AP Statistics 1	0	0
1663	Pre-Calculus and Trig 2	218	244
1662	Pre-Calculus and Trig 1	69	42
1661	Algebra/Statistics 2	41	12
1660	Algebra/Statistics 1	20	6
1650	Math Analysis	6	1
1600	Trigonometry	1	0
1552	The Seminar School Math 2	0	0

<u>Course Number</u>	<u>Course</u>	<u>1998-99</u>	<u>1997-98</u>
1551	The Seminar School Math 1	2	2
1378	Algebra II-2	363	362
1377	Algebra II-1	86	70
1503	Geometry 2	223	230
1502	Geometry 1	79	54
1505	Informal Geometry 2	77	53
1504	Informal Geometry 1	14	12
1353	Algebra I-2	123	110
1352	Algebra I-1	45	41
1348	Algebra B-2	1	0
1346	Algebra A-2	4	0
1345	Algebra A-1	1	1
1327	Survey of Algebra 2	47	43
1326	Survey of Algebra 1	16	12
1032	Pre-Algebra 2	28	32
1031	Pre-Algebra 1	6	3
1080	Career Math	1	1
1022	Basic Math Skills 2	5	1
1021	Basic Math Skills 1	0	3
<u>1018</u>	<u>Math 9-12</u>	<u>33</u>	<u>31</u>
		1,801	1,623