

Syosset School District

Algebra 2 Common Core Mathematics

Parent Meeting: November 2 , 2015

Curriculum

- The implementation of the Common Core Curriculum started in 2012/2013 in grades K-8.
 - Rolled out in one big block
- The Commencement Level (High School) Curriculum was phased in
 - 2013/2014: Algebra I - Syosset Grade 8
 - 2014/2015: Geometry - Syosset Grade 9
 - 2015/2016: Algebra II – Syosset Grade 10

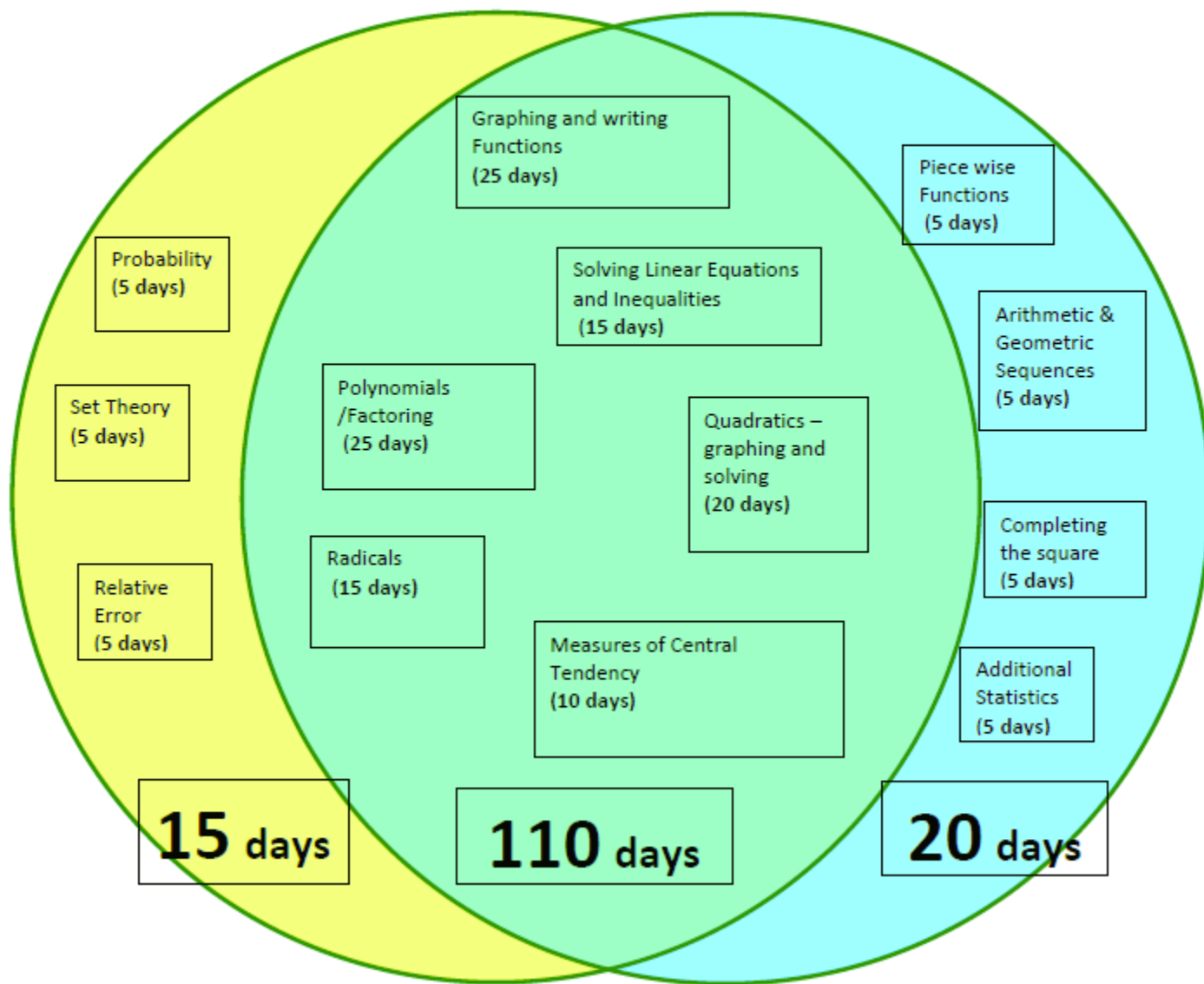
- As each new curriculum was introduced, at the commencement level, the NYSED gave students the option of taking the “old” and “new” exams.
- The higher of the two grades would be reflected in students’ course average and on students’ transcripts
- In Syosset, we were able to successfully prepare students for both exams in Algebra 1 and Geometry because of the substantial overlap in topics in both the “old” and “new”

For Algebra 1:

There was approximately $\frac{3}{4}$ overlap in topics

Integrated Algebra
125 days
Of new instruction

Algebra 1 CCSS
130 days
Of new instruction

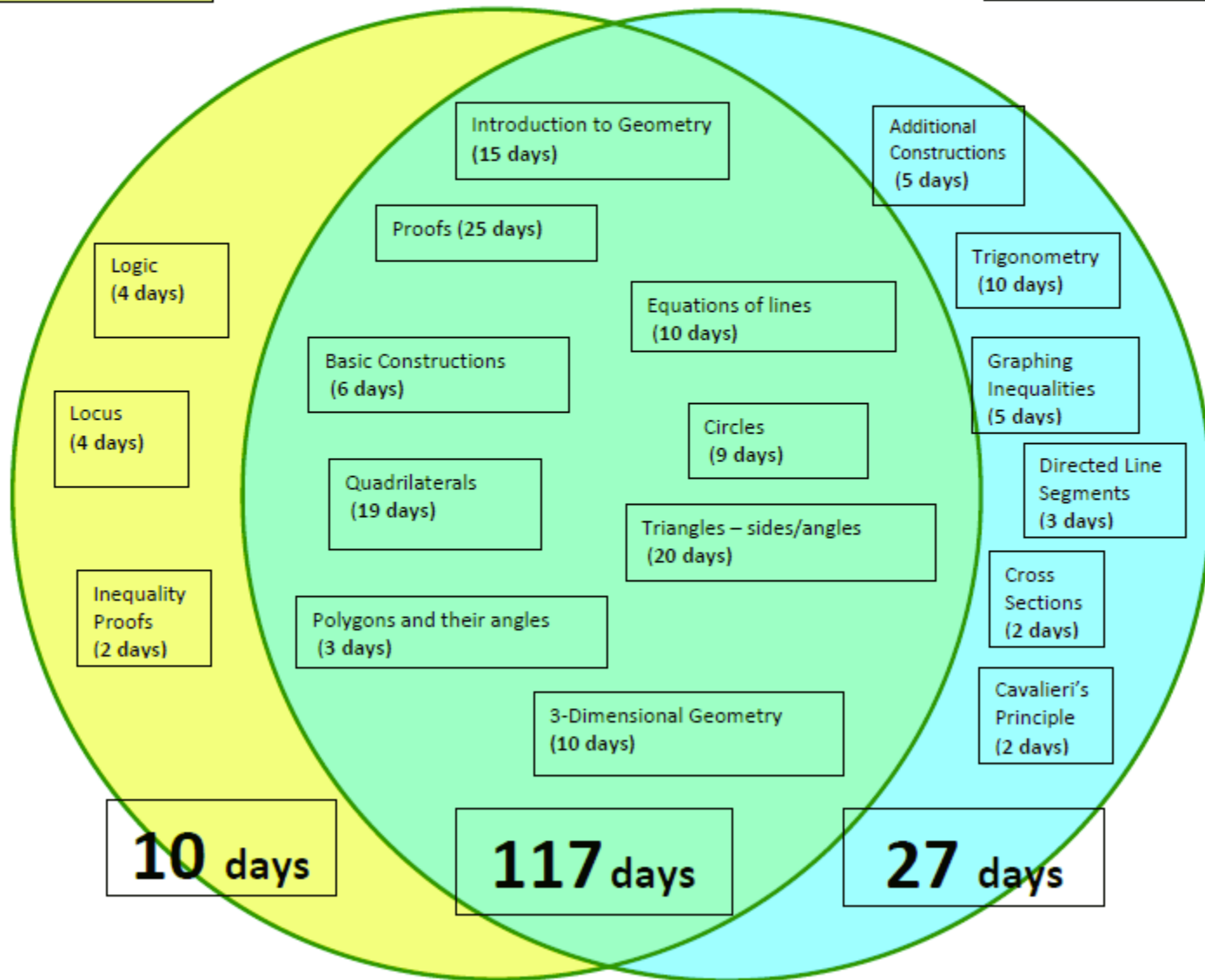


For Geometry:

There was even more overlap in topics

Geometry
127 days
Of new instruction

Geometry CCSS
144 days
Of new instruction



10 days

117 days

27 days

For Algebra II CCSS

- For Algebra II CCSS, only 1/3 of topics are the same as the Algebra 2 /Trigonometry topics
- The state recognized this also, and in May, 2015 stated that students would not have option to take both exams

The courses of Algebra II (Common Core) and Algebra 2/Trigonometry are distinctly different. Allowing students to take both exams would place an unnecessary burden on students and teachers to cover standards for both courses.

Algebra 2 & Trigonometry

140 days

Of new instruction

Algebra 2 CCSS

145 days

Of new instruction

Trigonometry
(50 days)

Probability - combinations
(15 days)

Binomial Expansion
(7 days)

72 days

Algebraic fractions,
inequalities, radicals,
complex numbers
(38 days)

Trig. from geometry
(11 days)

Logs & exponents &
natural log
(13 days)

Sequence & series
(6 days)

68 days

Functions
(36 days)

Statistics and probability
(23 days)

Algebra/Polynomials
(10 days)

Additional log &
exponential topics
(5 days)

Sequence & series
(3 days)

77 days

In August, 2015, NYSED appeared to have changed their mind.

- They would relook at the regulation

In September, NYSED proposed a change

- Students may be given the option of taking both exams (A2T and Algebra II) and allow the higher of the two grades to be used for transcript purposes.
- Vote on this proposal is slated for next month

So... currently – students are to be receiving instruction in common core Algebra 2, and take the CCSS Algebra 2 Regents exam.

Therefore:

- SHS is focusing on Algebra 2 CCSS
 - State requires that CCSS instruction be given
 - Students have taken 2 years of CCSS instruction
 - Teachers have prepared curriculum
 - Now – the only permissible regents is the Algebra II CCSS exam

Some districts are preparing students only for the old Algebra 2/Trig exam

- Students must take the CCSS exam
- At this time, not guaranteed option of second exam
- We're accelerated by year, therefore plenty of time for Trig prior to SATs

Algebra

Integrated Algebra (old)	Algebra I (Common Core)	Probability
		Set Theory
		Relative Error
		Graphing and Writing
		Solving Linear Equations
		Radicals
		Polynomials/ Factoring
		Quadratics - Graphing & Solving
		Central Tendency
		Piece wise fn.
Arithy/Geom Seq.		
Addit'l Stats.		
Compl. Sq.		

Geometry

Geometry (old)	Geometry (Common Core)	Logic	In.
		Locus	Pr.
		Intro to Geometry Proofs	
		Equations of Lines	
		Basic Construct.	
		Circles	
		Quadrilaterals	
		Triangles - sides/angles	
		polygons	
		3-Dimensional Geom.	Dir. Line
Addl. Construct.			
Trigonometry			
Graphing Ineq.			
x-sec	Cov.		

Algebra 2/Trig.

Algebra 2/Trigonometry (old)	Algebra 2 (Common Core)	Trigonometry
		Probability
		Binomial Expansion
		Algebraic fractions, inequalities, radicals, complex numbers
		Trig. From Geometry
		Logs & exponents & natural log
		Seq. and Series
		Functions
		Statistics & Probability
		Algebra/ Polynomials
Addit'l log/exp.		
Seq. ser.		

If

Regents permits flexibility of both exams in December

Students would have the choice to take the Algebra 2/Trig Regents during the following 3 administrations:

	June 2016	August 2016	January 2017
Pro:			<ul style="list-style-type: none">• Requires no new course work• students learning trig in Precalc
Con:	<ul style="list-style-type: none">• Additional spring course work• Redundancy of curriculum in PreCalc	<ul style="list-style-type: none">• Additional summer course work• Redundancy of curriculum in PreCalc	<ul style="list-style-type: none">• Possible review sessions

Passing Levels

Integrated Algebra (Old)			Algebra 1 CCSS		
Raw Score		Scale Score	Raw Score		Scale Score
51	59%	79	51	59%	72
50	57%	79	50	58%	72
49	56%	78	49	57%	72
48	55%	78	48	56%	72
47	54%	77	47	55%	71
46	53%	77	46	53%	71
45	52%	76	45	52%	71
44	51%	76	44	51%	71
43	49%	75	43	50%	70
42	48%	75	42	49%	70
41	47%	74	41	48%	70
40	46%	73	40	47%	70
39	45%	73	39	45%	69
38	44%	72	38	44%	69
37	43%	71	37	43%	69
36	41%	70	36	42%	68
35	40%	69	35	41%	68
34	39%	68	34	40%	67
33	38%	67	33	38%	67
32	37%	66	32	37%	66
31	36%	65	31	36%	66
30	34%	64	30	35%	65

Geometry (old)			Geometry CCSS		
Raw Score		Scale Score	Raw Score		Scale Score
51	59%	72	51	59%	77
50	58%	71	50	58%	76
49	57%	71	49	57%	76
48	56%	70	48	56%	75
47	55%	69	47	55%	75
46	53%	69	46	53%	74
45	52%	68	45	52%	73
44	51%	67	44	51%	73
43	50%	67	43	50%	72
42	49%	66	42	49%	72
41	48%	66	41	48%	71
40	47%	65	40	47%	70
39	45%	64	39	45%	70
38	44%	63	38	44%	69
37	43%	62	37	43%	68
36	42%	62	36	42%	68
35	41%	61	35	41%	67
34	40%	60	34	40%	66
33	38%	59	33	38%	65
32	37%	58	32	37%	64
31	36%	57	31	36%	63
30	35%	56	30	35%	62

Algebra 2 /Trig (old)		
Raw Score		Scale Score
51	58%	70
50	57%	69
49	56%	68
48	55%	67
47	53%	66
46	52%	65
45	51%	64
44	50%	63
43	49%	62
42	48%	61
41	47%	60
40	45%	59
39	44%	58
38	43%	57
37	42%	56
36	41%	55
35	40%	53
34	39%	52
33	38%	51
32	36%	50
31	35%	49
30	34%	48

Summary for passing rates:

Exam	Raw	% Correct	Scale Score
Integrated Algebra (old)	31	36%	65
CCSS Algebra 1	30	35%	65
Geometry (old)	40	47%	65
CCSS Geometry	33	38%	65
Algebra 2/Trig	46	52%	65

Mastery levels:

Integrated Algebra (old)

Raw Score		Scale Score
86	99%	99
85	98%	98
84	97%	97
83	95%	96
82	94%	95
81	93%	94
80	92%	93
79	91%	92
78	90%	92
77	89%	91
76	87%	90
75	86%	90
74	85%	89
73	84%	88
72	83%	88
71	82%	87
70	80%	87
69	79%	86
68	78%	86
67	77%	86
66	76%	85
65	75%	84
64	74%	84
63	72%	84
62	71%	83
61	70%	83
60	69%	83

Algebra 1 CCSS

Raw Score		Scale Score
86	100%	100
85	99%	98
84	98%	97
83	97%	96
82	95%	94
81	94%	93
80	93%	92
79	92%	90
78	91%	89
77	90%	88
76	88%	86
75	87%	85
74	86%	84
73	85%	83
72	84%	82
71	83%	81
70	81%	80
69	80%	80
68	79%	79
67	78%	78
66	77%	78
65	76%	77
64	74%	77
63	73%	76
62	72%	76
61	71%	75
60	70%	75

Geometry (old)

Raw Score		Scale Score
86	100%	100
85	99%	98
84	98%	97
83	97%	96
82	95%	94
81	94%	93
80	93%	92
79	92%	91
78	91%	90
77	90%	89
76	88%	88
75	87%	87
74	86%	86
73	85%	86
72	84%	85
71	83%	84
70	81%	83
69	80%	83
68	79%	82
67	78%	81
66	77%	81
65	76%	80
64	74%	79
63	73%	79
62	72%	78
61	71%	78
60	70%	77

Geometry CCSS

Raw Score		Scale Score
86	100%	100
85	99%	99
84	98%	98
83	97%	97
82	95%	96
81	94%	95
80	93%	94
79	92%	93
78	91%	92
77	90%	91
76	88%	90
75	87%	90
74	86%	89
73	85%	88
72	84%	88
71	83%	87
70	81%	86
69	80%	86
68	79%	85
67	78%	84
66	77%	84
65	76%	83
64	74%	83
63	73%	82
62	72%	82
61	71%	81
60	70%	81

Algebra 2 /Trig (old)

Raw Score		Scale Score
86	98%	99
85	97%	98
84	95%	98
83	94%	97
82	93%	96
81	92%	96
80	91%	95
79	90%	94
78	89%	94
77	88%	93
76	86%	92
75	85%	92
74	84%	91
73	83%	90
72	82%	89
71	81%	88
70	80%	88
69	78%	87
68	77%	86
67	76%	85
66	75%	84
65	74%	84
64	73%	83
63	72%	82
62	70%	81
61	69%	80
60	68%	79

Summary for mastery rates:

Exam	Raw	% Correct	Scale Score
Integrated Algebra (old)	66	76%	85
CCSS Algebra 1	76	87%	85
Geometry (old)	72	84%	85
CCSS Geometry	68	79%	85
Algebra 2/Trig	67	76%	85

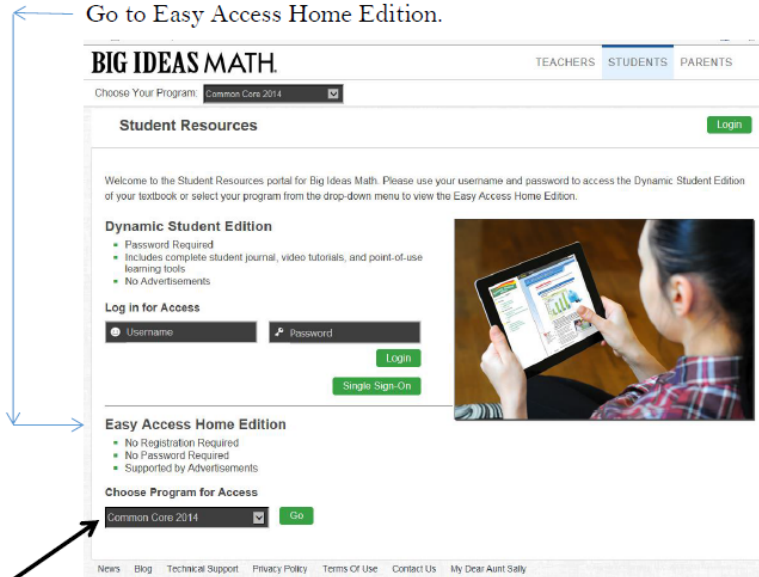
June 2015 Exam Results

Syosset School District	% of students Passing : ≥ 65	% of students Mastery ≥ 85	Mean Scale Score
CCSS Algebra	93%	20%	77.6
Integrated Algebra	97%	57%	85.4
CCSS Geometry	95%	42%	82.2
Geometry	96%	56%	85.0
A2T	92%	48%	82.5

The State ensured that the passing rates were similar, but made it much more difficult to earn a Mastery level score. Whether that is the result of a more challenging exam, some unfair items, a skewed scoring matrix, or a curriculum still in transition remains to be determined, and we continue to give it attention.

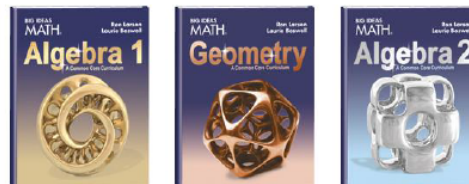
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Resources for
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Student Journals



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Handbook



Game Closet



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Other websites for additional resources

- Kahn Academy - you do not need to sign up - <https://www.khanacademy.org/>
- E-instruction - <http://emathinstruction.com/common-core-algebra-ii>
- NYSED - <http://www.engageny.org/resource/algebra-ii-module-1>