MAK Outcome 0.1: Sorting

Outcome Number	Objective	Standard
MAK 0.1.1	Compare objects and describe how they are alike and different	0.4.1
MAK 0.1.2	Identify, sort, and classify objects by color	04.2
MAK 0.1.3	Identify, sort, and classify objects by size.	0.3.1
MAK 0.1.4	Identify, sort and classify objects by shape	0.3.1
MAK 0.1.5	Identify, sort, and classify objects by kind	0.4.2
MAK 0.1.6	Develop and explain own rules for sorting	0.4.1
MAK 0.1.7	Use logical thinking to solve sorting problems	0.4.1

MAK Outcome 0.2: Position cp. and Patterns O

Outcome Number	Objective	Standard
MAK 0.2.1	Identify and describe spatial relationships: top, middle, and bottom.	0.4.2
MAK 0.2.2	Identify and describe spatial relationships: before, after, between	0.4.2
MAK 0.2.3	Compare and identify positions left and right.	0.4.2
MAK 0.2.4	Compare and identify positions of objects, using inside and outside.	0.4.2
MAK 0.2.5	Identify and describe spatial relationships: over, under, on, up, down, on top of	0.4.2
MAK 0.2.6	Identify and extend patterns.	0.4.1
MAK 0.2.7	Create and translate patterns.	0.4.1
MAK 0.2.8	Model, describe, and extend growing patterns.	0.4.1

MAK Outcome 1: Represent, Count, and Write Numbers 0 to 5

Outcome Number	Objective	Standard
MAK 1.1	Model and Count 1 and 2	0.1.1
MAK 1.2	Count and write 1 and 2	0.1.1
MAK 1.3	Model and Count 3 and 4	0.1.1
MAK 1.4	Count and Write 3 and 4	0.1.1
MAK 1.5	Model and Count to 5	0.1.1
MAK 1.6	Count and Write to 5	0.1.1
MAK 1.7	Ways to Make 5	0.1.1
MAK 1.8	Count and Order to 5	0.1.1
MAK 1.9	Understand 0	0.1.1
MAK 1.10	Identify and Write 0	0.1.1

MAK Outcome 2: Represent and Read Numbers 0 - 5

Outcome Number	Objective	Standard
MAK2.1	Same Number	0.1.1
MAK2.2	Greater Than	0.1.1
MAK4.3	Less Than	0.1.1
MAK2.4	Compare by Matching Sets to 5	0.1.1
MAK2.5	Compare by Counting Sets to 5	0.1.1

MAK Outcome 3: Represent, Count, and Write Numbers 6 to 9

Outcome Number	Objective	Standard
MAK6.1	Model and Count 6	0.1.1
MAK6.2	Count and Write to 6	0.1.1
MAK6.3	Model and Count 7	0.1.1
MAK6.4	Count and Write to 7	0.1.1
MAK6.5	Model and Count 8	0.1.1
MAK6.6	Count and Write to 8	0.1.1
MAK6.7	Model and Count 9	0.1.1
MAK6.8	Count and Write to 9	0.1.1
MAK6.9	Numbers to 9	0.1.1

MAK Outcome 4: Represent and Compare Numbers to 10

Outcome Number	Objective	Standard
MAK4.1	Model and Count 10	0.1.1
MAK4.2	Count and write to 10	0.1.1
MAK4.3	Ways to Make 10	0.1.1
MAK4.4	Count and Order to 10	0.1.1
MAK4.5	Compare by Matching Sets to 10	0.1.1
MAK4.6	Compare by Counting Sets to 10	0.1.1
MAK4.7	Compare Two Numbers	0.1.1

MAK Outcome 5: Addition

Outcome Number	Objective	Standard
MAK5.1	Addtion: Add to	0.1.2
MAK5.2	Addition: Put Together	0.1.2
MAK5.3	Act Out Addition Problems	0.1.2

MAK5.4	Model and Draw Addition Problems	0.2.1
MAK5.5	Write Addition Sentences to 10	0.2.1
MAK5.6	Write Addition Sentences	0.2.1
MAK5.7	Write More Addition Sentences	0.2.2
MAK5.8	Number Pairs to 5	0.2.2
MAK5.9	Number Pairs for 6 and 7	0.2.3
MAK5.10	Number Pairs for 8	0.2.3
MAK5.11	Number Pairs for 9	0.2.3
MAK5.12	Number Pairs for 10	0.2.3

MAK Outcome 6: Subtraction

Outcome Number	Objective	Standard
MAK86.1	Subtraction: Take From	0.1.2
MAK6.2	Subtraction: Take Apart	0.2.1
MAK6.3	Act Out Subtraction Problems	0.2.1
MAK6.4	Model and Draw Subtraction Problems	0.2.1
MAK6.5	Write Subtraction Sentences	0.2.2
MAK6.6	Write More Subtraction Sentences	0.2.2
MAK6.7	Addition and Subtraction	0.2.3

MAK Outcome 7: Represent, Count, and Write 11 to 19

Outcome Number	Objective	Standard
MAK7.1	Model and Count 11 and 12	0.1.1
MAK7.2	Count and Write 11 and 12	0.1.1
MAK7.3	Model and Count 13 and 14	0.1.1
MAK7.4	Count and Write 13 and 14	0.1.1
MAK7.5	Model and Count 15	0.1.1
MAK7.6	Use Numbers to 15	0.1.1
MAK7.7	Model and Count 16 and 17	0.1.1
MAK7.8	Count and Write 16 and 17	0.1.1
MAK7.9	Model and Count 18 and 19	0.1.1
MAK7.10	Count and Write 18 and 19	0.1.1

MAK Outcome 8: Represent, Count, and Write 20 and Beyond

Outcome Number	Objective	Standard
MAK8.1	Model and Count 20	0.1.1
MAK8.2	Count and Write to 20	0.1.1
MAK8.3	Count and Order to 20	0.1.1

MAK8.4	Compare Numbers to 20	0.1.1
MAK8.5	Count to 50 by Ones	0.1.1
MAK8.6	Count to 100 by Ones	0.1.1
MAK8.7	Count to 100 by Tens	0.1.1
MAK8.8	Count by Tens	0.1.1

MAK Outcome 9: Identify and Describe Two-Dimensional Shapes

Outcome Number	Objective	Standard
MAK9.1	Identify and Name Circles	0.3.1
MAK9.2	Describe Circles	0.3.1
MAK9.3	Identify and Name Squares	0.3.1
MAK9.4	Describe Squares	0.3.1
MAK9.5	Identify and Name Triangles	0.3.1
MAK9.6	Describe Triangles	0.3.1
MAK9.7	Identify and Name Rectangles	0.3.1
MAK9.8	Describe Rectangles	0.3.1
MAK9.9	Identify and Name Hexagons	0.3.1
MAK9.10	Describe Hexagons	0.3.1
MAK9.11	Compare Two-Dimensional Shapes	0.3.1
MAK9.12	Draw to Join Shapes	0.3.1

MAK Outcome 10: Identify and Describe Three-Dimensional Shapes

Outcome Number	Objective	Standard
MAK10.1	Three-Dimensional Shapes	0.3.1
MAK10.2	Identify, Name, and Describe Spheres	0.3.1
MAK10.3	Identify, Name, and Describe Cubes	0.3.1
MAK10.4	Identify, Name, and Describe Cylinders	0.3.1
MAK10.5	Identify, Name, and Describe Cones	0.3.1
MAK10.6	Two and Three Dimensional Shapes	0.3.1
MAK10.7	Model Shapes	0.3.1
MAK10.8	Above and Below	0.3.2
MAK10.9	Beside and Next to	0.3.2
MAK10.10	In Front of and Behind	0.3.2

MAK Outcome 11: Measurement

Outcome Number	Objective	Standard
MAK11.1	Compare Lengths	0.3.3

MAK11.2	Compare Heights	0.3.3
MAK11.3	Direct Comparison	0.3.3
MAK11.4	Compare Weights	0.3.3
MAK11.5	Length, Height, and Weight	0.3.3

MAK Outcome 12: Classify and Sort Data

Outcome Number	Objective	Standard
MAK12.1	Classify and Count by Color	0.4.1
MAK12.2	Classify and Count by Shape	0.4.1
MAK12.3	Classify and Count by Size	0.4.1
MAK12.4	Make a Concrete Graph	0.4.2
MAK12.5	Read a Graph	0.4.2

MA1 Outcome 1: Addition Concepts

Outcome Number	Objective	Standard
MA1 1.1	Use Pictures to Add to	1.1.2
MA1 1.2	Model Adding to: Hands on	1.1.2
MA1 1.3	Model Putting Together: Hands on	1.1.2
MA1 1.4	Model Addtion: Problem solving	1.1.2, 1.2.3.a
MA 1.5	Add Zero: Algebra	1.1.2
MA 1.6	Add in any order: Algebra Hands on	1.1.2, 1.2.1
MA 1.7	Put Together numbers to 10: Algebra Hands on	1.1.2
MA 1.8	Addition to 10	1.1.2

MA1 Outcome 2: Subtraction Concepts

Outcome Number	Objective	Standard
MA1 2.1	Use Pictures to show taking from	1.1.2
MA1 2.2	Model Taking From: Hands on	1.1.2
MA1 2.3	Model Taking apart: Hands on	1.1.2
MA1 2.4	Model Subtraction: Problem Solving	1.1.2, 1.2.3.a
MA1 2.5	Use pictures and subtraction to compare	1.1.2
MA1 2.6	Subtract to Compare: Hands on	1.1.2
MA1 2.7	Subtract All or Zero	1.1.2
MA1 2.8	Take Apart Numbers: Hands on Algebra	1.1.2

MA1 2.9	Subraction from 10 or less	1.1.2

MA1 Outcome 3: Addition Strategies

Outcome Number	Objective	Standard
MA1 3.1	Add in any order: Algebra	1.2.1.d
MA1 3.2	Count on	1.2.1.c
MA1 3.3	Add Doubles: hands on	1.1.2
MA1 3.4	Use Doubles to add: hands on	1.1.2
MA1 3.5	Doubles plus 1 and doubles minus 1	1.1.2
MA1 3.6	Practice the Strategies	1.1.2
MA1 3.7	Add 10 and More: hands on	1.1.2.d
MA1 3.8	Make a 10 to add: hands on	1.2.2.a
MA1 3.9	Use Make a 10 to add	1.2.2.a
MA1 3.10	Add 3 numers: algebra hands on	1.2.1, 1.2.3.b
MA1 3.11	Add 3 numbers: algebra	1.2.1, 1.2.3.b
MA1 3.12	Use addition strategies: problem solving	1.2.1.b, 1.2.3.a, 1.2.3.c

MA1 Outcome 4: Subtraction Strategies

Outcome Number	Objective	Standard
MA1 4.1	Count Back	1.2.1.c
MA1 4.2	Think Addition to Subtract	1.1.2.a, 1.1.2.b, 1.1.2.c, 1.1.2.d, 1.1.2.e
MA1 4.3	Use Think addition to subtract	1.1.2
MA1 4.4	Use 10 to Subtract	1.1.2.d
MA1 4.5	Break apart to subtract	1.2.2.a
MA1 4.6	Use subtraction strategies: problem solving	1.1.2, 1.2.3.a, 1.2.3.c

MA1 Outcome 5: Addition and Subtraction Relationships

Outcome Number	Objective	Standard

MA1 5.1	Add or Subtract: problem solving	1.1.2.a, 1.1.2.b, 1.2.3.a.b.c
MA1 5.2	Record Related Facts: hands on	1.1.2
MA1 5.3	Identify related facts	1.1.2
MA1 5.4	Use Addition to Check Subtraction	1.2.1.b
MA1 5.5	Unknown Numbers: hands on algebra	1.2.1.d
MA1 5.6	Use Related Facts: Algebra	1.2.1
MA1 5.7	Choose an Operation	1.2.1
MA1 5.8	Ways to Make Numbers to 20: Hands On Algebra	1.1.2.b, 1.2.3.b
MA1 5.9	Equal and Not Equal: Algebra	1.2.1.a, 1.1.1.f
MA1 5.10	Basic Facts to 20	1.1.2.b

MA1 Outcome 6: Count and Model Numbers

Outcome Number	Objective	Standard
MA1 6.1	Count by Ones to 120	1.1.1.a, 1.1.1.b
MA1 6.2	Count by Tens to 120	1.1.1.a, 1.1.1.b
MA1 6.3	Understand Ten and Ones	1.1.1.a, 1.1.1.d, 1.1.1.e 1.1.1.f
MA1 6.4	Make Ten and Ones: Hands On	1.1.1.a, 1.1.1.d, 1.1.1.e 1.1.1.f
MA1 6.5	Tens: Hands On	1.1.1.a, 1.1.1.d, 1.1.1.f
MA1 6.6	Tens and Ones to 50: Hands On	1.1.1.a, 1.1.1.d 1.1.1. e, 1.1.1.f
MA1 6.7	Tens and Ones to 100: Hands On	1.1.1.a, 1.1.1.d 1.1.1.e, 1.1.1.f

MA1 6.8	Show Numbers in Different Ways: Problem Solving	1.1.1.b, 1.1.1.d, 1.2.3
MA1 6.9	Model, Read, and Write Numbers from 100 to 110	1.1.1.a, 1.1.1.b, 1.1.1.c
MA1 6.10	Model, Read, and Write Numbers from 110 to 120	1.1.1.a, 1.1.1.b, 1.1.1.c

MA1 Outcome 7: Compare Numbers

Outcome Number	Objective	Standard
MA1 7.1	Greater Than: Hands On Algebra	1.1.1.f
MA1 7.2	Less Than: Hands On Algebra	1.1.1.f
MA1 7.3	Use Symbols to Compare: Hands On Algebra	1.1.1.f
MA1 7.4	Compare Numbers: Problem Solving	1.1.1.f
MA1 7.5	10 Less, 10 More: Hands On	1.1.2.d, 1.1.1.f

MA1 Outcome 8: Two-Digit Addition and Subtraction

Outcome Number	Objective	Standard
MA1 8.1	Add and Subtract within 20	1.1.2.b
MA1 8.2	Add Tens: Hands On	1.1.2.d
MA1 8.3	Subtract Tens: Hands On	1.1.2.d
MA1 8.4	Use a Hundred Chart to Add	1.1.2.e
MA1 8.5	Use Models to Add: Hands On	1.1.2.e
MA1 8.6	Make Ten to Add: Hands On	1.2.2.a
MA1 8.7	Use Place Value to Add: Hands On	1.1.1.d, 1.1.2.b
MA1 8.8	Addition Word Problems: problem Solving	1.2.3
MA1 8.9	Related Addition and Subtraction	1.2.1.b
MA1 8.10	Practice Addition and Subtraction	1.1.2.a, 1.1.2.b, 1.1.2.e,

MA1 Outcome 9: Measurement

Outcome Number	Objective	Standard
MA1 9.1	Order Length: Hands On	1.3.3.d
MA1 9.2	Indirect Measurement	1.3.3.d
MA1 9.3	Use Nonstandard Units to Measure Length: Hands On	1.3.3.c
MA1 9.4	Make a Nonstandard Measuring Tool: Hands On	1.3.3.c
MA1 9.5	Measure and Compare: Problem Solving	1.3.3.c
MA1 9.6	Time to the Hour	1.3.3.b
MA1 9.7	Time to the Half Hour	1.3.3.b
MA1 9.8	Tell Time to the Hour and Half Hour	1.3.3.b
MA1 9.9	Practice Time to the Hour and Half Hour	1.3.3.b
MA1 9.10	Coins	1.3.3.a

MA1 Outcome 10: Represent Data

Outcome Number	Objective	Standard
MA1 10.1	Read Picture Graphs	1.4.1.a, 1.4.2.a
MA1 10.2	Make Picture Graphs: Hands On	1.4.1.a, 1.4.2.a
MA1 10.3	Read Bar Graphs	1.4.1
MA1 10.4	Make Bar Graphs: Hands On	1.4.1, 1.4.2
MA1 10.5	Read Tally Charts	1.4.1
MA1 10.6	Make Tally Charts: Hands On	1.4.1, 1.4.2
MA1 10.7	Represent Data: Problem Solving	1.4.1, 1.4.2

MA1 Outcome 11: Three- Dimensional Geometry

Outcome Number	Objective	Standard
MA1 11.1	Three-Dimensional Shapes: Hands On	1.3.1.c
MA1 11.2	Combine Three-Dimensional Shapes: Hands On	1.3.1.c
MA1 11.3	Make New Three-Dimensional Shapes: Hands On	1.3.1.c
MA1 11.4	Take Apart Three-Dimensional Shapes: Problem Solving	1.3.1.c
MA1 11.5	Two-Dimensional Shapes on Three-Dimensional Shapes	1.3.1.c

MA1 Outcome 12: Two-Dimensional Geometry

Outcome Number	Objective	Standard
MA1 12.1	Sort Two-Dimensional Shapes	1.3.1.a
MA1 12.2	Describe Two-Dimensional Shapes: Hands On	1.3.1.a
MA1 12.3	Combine Two-Dimensional Shapes: Hands On	1.3.1.a, 1.3.1.c
MA1 12.4	Combine More Shapes	1.3.1.a, 1.3.1.c
MA1 12.5	Make New Two-Dimensional Shapes	1.3.1.a,
MA1 12.6	Find Shapes in Shapes: Hands On	1.3.1.a, 1.3.1.c
MA1 12.7	Take Apart Two-Dimensional Shpaes	1.3.1.c
MA1 12.8	Equal or Unequal Parts	1.3.1.b
MA1 12.9	Halves	1.3.1.b
MA1 12.10	Fourths	1.3.1.b

MA2 Outcome 1: Number Concepts (last updated with GoMath series May 2018)

Outcome Number	Objective	Standard
MA2 1.1	Even and Odd Numbers	2.2.1.a
MA2 1.2	Represent Even Numbers	2.2.1.a
MA2 1.3	Understand Place Value	2.1.1.b

MA2 1.4	Expanded Form	2.1.1.b
MA2 1.5	Different Ways to Write Numbers	2.1.1.b
MA2 1.6	Different Names for Numbers	2.1.1.b
MA2 1.7	Tens and Ones	2.1.1.b, 2.1.2.b
MA2 1.8	Counting Patterns Within 100	2.1.1.a
MA2 1.9	Counting Patterns Within 1,000	2.1.1.a

MA2 Outcome 2: Numbers Through 1,000

Outcome Number	Objective	Standard
MA2 2.1	Group Tens as Hundreds	2.1.1.d
MA2 2.2	Explore 3 Digit Numbers	2.1.1.b. 2.1.1.c
MA2 2.3	Model 3 Digit Numbers	2.1.1.b, 2.1.1.c
MA2 2.4	Hundreds, Tens and Ones	2.1.1.b, 2.1.1.c
MA2 2.5	Place Value to 1,000	2.1.1.c, 2.1.1.d, 2.1.1.e
MA2 2.6	Number Names	2.1.1.b
MA2 2.7	Different Forms of Numbers	2.1.1.b, 2.1.1.c
MA2 2.8	Different Ways to Show Numbers	2.1.1.c, 2.1.2.a
MA2 2.9	Count on and Count Back by 10 and 100	2.1.1.a, 2.1.2.c
MA2 2.10	Number Patterns	2.1.1.a, 2.1.2.a
MA2 2.11	Compare Numbers	2.1.1.a, 2.1.1.c, 2.1.1.c, 2.2.3.b
MA2. 2.12	Compare Numbers	2.1.1.e, 2.1.2.b

MA2 Outcome 3: Basic Facts and Relationships (Start of Addition and Subtraction)

Outcome Number	Objective	Standard

MA2 3.1	Use Doubles Facts	2.1.2.a, 2.1.2.b
MA2 3.2	Practice Addition Facts	2.1.2.a, 2.1.2.b
MA2 3.3	Make a Ten to Add	2.1.2.a, 2.1.2.b
MA2 3.4	Add 3 Addends	2.1.2.a, 2.1.2.b
MA2 3.5	Relate Addition and Subtraction	2.1.2.a, 2.1.2.b
MA2 3.6	Practice Subtraction Facts	2.1.2.a, 2.1.2.b
MA2 3.7	Use Ten to Subtract	2.1.2.a, 2.1.2.b, 2.3.3.g
MA2 3.8	Use Drawings to Represent Problems	2.1.2.a, 2.1.2.b, 2.2.3.a, 2.2.3.b
MA2 3.9	Use Equations to Represent	2.1.2.a, 2.1.2.b, 2.1.2.e, 2.2.3.a, 2.2.3.b
MA2 3.10	Equal Groups	2.1.1.a, 2.1.2.a, 2.1.2.f
MA2 3.11	Repeated Addition	2.1.1.a, 2.1.2.a, 2.1.2.f

MA2 Outcome 4: 2-Digit Addition

Outcome Number	Objective	Standard
MA2 4.1	Break Appart Ones to Add	2.1.2.a, 2.1.2.b
MA2 4.2	Use Compensation	2.1.2.a, 2.1.2.b
MA2 4.3	Break Apart Addends as Tens and Ones	2.1.1.b, 2.1.2.a, 2.1.2.b
MA2 4.4	Model Regrouping for Addition	2.1.2.a, 2.1.2.b

MA2 4.5	Model and Record 2 Digit Addition	2.1.2.a, 2.1.2.b
MA2 4.6	2-Digit Addition	2.1.2.a, 2.1.2.b
MA2 4.7	Practice 2-Digit Addition	2.1.2.a, 2.1.2.b
MA2 4.8	Practice 2-Digit Addition	2.1.2.a, 2.1.2.b
MA2 4.9	Addition	2.1.2.a, 2.1.2.b, 2.2.3.a, 2.2.3.b
MA2 4.10	Write Equations to Represent Addition	2.1.2.a, 2.1.2.b, 2.2.3.a, 2.2.3.b
MA2 4.11	Find Sums for 3 Addends	2.1.2.a, 2.1.2.b, 2.1.2.d, 2.1.2.e
MA2 4.12	Find Sums for 4 Addends	2.1.2.a, 2.1.2.b, 2.1.2.d, 2.1.2.e

MA2 Outcome 5: 2-Digit Subtraction

Outcome Number	Objective	Standard
MA2 5.1	Break Apart Ones to Subtract	2.1.2.a, 2.1.2.b, 2.3.3.g
MA2 5.2	Break Apart Numbers to Subtract	2.1.2.a, 2.1.2.b, 2.3.3.g
MA2 5.3	Model Regrouping for Subtraction	2.1.2.a, 2.1.2.b, 2.1.2.e
MA2 5.4	Model and Record 2-Digit Subtraction	2.1.2.a, 2.1.2.b, 2.1.2.e
MA2 5.5	2-Digit Subtraction	2.1.2.a, 2.1.2.b, 2.1.2.e

MA2 5.6	Practice 2-Digit Subtraction	2.1.2.a, 2.1.2.b, 2.1.2.e
MA2 5.7	Rewrite 2-Digit Subtraction	2.1.2.a, 2.1.2.b,
MA2 5.8	Add to Find Differences	2.1.2.a, 2.1.2.b, 2.3.3.g
MA2 5.9	Subtraction	2.1.2.a, 2.1.2.b, 2.2.3.a, 2.2.3.b
MA2 5.10	Write Equations to Represent Subtraction	2.1.2.a, 2.1.2.b, 2.2.3.a, 2.2.3.b
MA2 5.11	Solve Multistep Problems	2.1.2.a, 2.1.2.b, 2.2.3.a, 2.2.3.b

MA2 Outcome 6: 3-Digit Addition And Subtraction

Outcome Number	**Objective**	**Standard**
MA2 6.1	Draw to Reprsent 3-Digit Addition	2.1.1.c, 2.1.2.e
MA2 6.2	Break Apart 3-Digit Addends	2.1.1.b, 2.1.2.e
MA2 6.3	3-Digit Addition: Regroup Ones	2.1.1.c, 2.1.2.e
MA2 6.4	3-Digit Addition: Regroup Tens	2.1.1.c, 2.1.1.d, 2.1.2.e
MA2 6.5	Addition: Regroup Tens and Ones	2.1.1.c, 2.1.1.d, 2.1.2.e
MA2 6.6	3 Digit Subtraction	2.1.1.e, 2.2.3.a, 2.2.3.b
MA2 6.7	3-Digit Subtraction: Regroup Tens	2.1.1.c, 2.1.2.e

MA2 6.8	3-Digit Subtraction: Regroup Hundreds	2.1.1.c, 2.1.1.d, 2.1.2.e
MA2 6.9	Subtraction: Regroup Hundreds and Tens	2.1.1.c, 2.1.1.d, 2.1.2.e
MA2 6.10	Regrouping with Zeros	2.1.1.c, 2.1.1.d, 2.1.2.e

MA2 Outcome 7: Money and Time (Start of Measurement and Data)

Outcome Number	Objective	Standard
MA2 7.1	Dimes, Nickels and Pennies	2.3.3.a
MA2 7.2	Quarters	2.3.3.a
MA2 7.3	Count Collections	2.3.3.a
MA2 7.4	Show Amounts in 2 Ways	2.3.3.a
MA2 7.5	One Dollar	2.3.3.a
MA2 7.6	Amounts Greater Than $1	2.3.3.a
MA2 7.7	Money	2.3.3.a
MA2 7.8	Time to the Hour and half Hour	2.3.3.b
MA2 7.9	Time to 5 Minutes	2.3.3.b
MA2 7.10	.Practice Telling Time	2.3.3.b
MA2 7.11	A.M. and P.M.	2.3.3.b

MA2 Outcome 8: Length in Customary Units

Outcome Number	Objective	Standard
MA2 8.1	Measure with Inch Models	2.3.3.d, 2.3.3.e
MA2 8.2	Make and Use a Ruler	2.3.3.c, 2.3.3.e
MA2 8.3	Estimate Lengths in Inches	2.3.3.e
MA2 8.4	Measure with an Inch Ruler	2.3.3.e, 2.3.3.h
MA2 8.5	Add and Subtract in Inches	2.3.3.g, 2.3.3.h
MA2 8.6	Measurement in Inches and Feet	2.3.3.c, 2.3.3.d, 2.3.3.e

MA2 8.7	Estimate Lengths in Feet	2.3.3.c, 2.3.3.d, 2.3.3.e
MA2 8.8	Choose a Tool	2.3.3.f, 2.3.3.c
MA2 8.9	Display Measurement Data	2.3.3.g, 2.3.3.h, 2.4.1.b

MA2 Outcome 9: Length in Metric Units

Outcome Number	Objective	Standard
MA2 9.1	Measure with Centimeter Models	2.3.3.d, 2.3.3.c
MA2 9.2	Estimate Lengths in Centimeters	2.3.3.e, 2.3.3.h
MA2 9.3	Measure with a Centimeter Ruler	2.3.3.c, 2.3.3.e
MA2 9.4	Add and Subtract Lengths	2.3.3.g, 2.3.3.h
MA2 9.5	Centimeters and Meters	2.3.3.c, 2.3.3.d, 2.3.3.e, 2.3.3.f
MA2 9.6	Estimate Lenths in Meters	2.3.3.c, 2.3.3.e
MA2 9.7	Measure and Compare Lengths	2.3.3.c, 2.3.3.e, 2.3.3.h

MA2 Outcome 10: Length in Metric Units

Outcome Number	Objective	Standard
MA2 10.1	Collect Data	**2.4.1**
MA2 10.2	Read Picture Graphs	2.4.1.a
MA2 10.3	Make Picture Graphs	2.4.1.a
MA2 10.4	Read Bar Graphs	2.4.1.a, 2.4.2.a
MA2 10.5	Make Bar Graphs	2.4.1.a, 2.4.2.a
MA2 10.6	Display Data	2.4.2.a

MA2 Outcome 11: Geometry and Fraction Concepts (Geometry and Fractions)

Outcome Number	Objective	Standard
MA2 11.1	Three Dimensional Shapes	**0.3.1.a, 0.3.1.c**
MA2 11.2	Attributes of Three-Dimensional Shapes	**0.3.1.a, 0.3.1.c**
MA2 11.3	Build Three Dimensional Shapes	2.3.1.b
MA2 11.4	Two-Dimensional Shapes	2.3.1.a
MA2 11.5	Angles in Two-Dimensional Shapes	2.3.1.a
MA2 11.6	Sort Two-Dimensional Shapes	2.3.1.a
MA2 11.7	Partition Rectangles	2.3.1.b
MA2 11.8	Equal Parts	2.3.1.c
MA2 11.9	Show Equal Parts of a Whole	2.3.1.d
MA2 11.10	Describe Equal Parts	2.3.1.c
MA2 11.11	Equal Shares	2.3.1.d

MA3 Outcome 1: Addition and Subtraction within 1000

Outcome Number	Objective	Standard
MA3 1.1	Identify and describe whole number patters	3.1.2a
MA3 1.2	Round 2 and 3 digit numbers to the nearest ten or hundred	3.1.1c
MA3 1.3	Compatible numbers and rounding to estimate sums	3.1.2h 3.1.1c
MA3 1.4	Strategies for mental math	3.1.2a
MA3 1.5	Use number lines and place value to compare and order numbers	3.1.1a 3.1.1b
MA3 1.6	Commutative and Associative Property of Addition and Distributive Properties	3.1.2a 3.1.2b 3.2.2a 3.2.1a
MA3 1.7	Break apart strategy to add 3 digit numbers	3.1.2a3.1.2 h
MA3 1.8	Solve addition and subtration problems	3.1.2c 3.1.2h

MA3 Outcome 2: Represent and Interpret Data

Outcome Number	Objective	Standard
MA3 2.1	Organize data in tables	3.4.1
MA3 2.2	Picture Graphs	3.4.1a 3.4.2c 3.4.1b
MA3 2.3	Bar Graphs	3.4.1a 3,4,2a
MA3 2.5	Read and Interpret data in line plots	3.4.1b
	Conduct a survey and record the results	3.4.1a

MA3 Outcome 3: Multiplication

Outcome Number	Objective	Standard
MA3 3.1	Model and skip count objects in equal groups	3.1.2f
MA3 3.2	Write and Addition sentence and multiplication sentence for a model	3.1.2c
MA3 3.3	Model with arrays	3.1.2f
MA3 3.4	Make a table to solve a problem	3.1.2b
MA3 3.5	Commutative Property of Multiplication	3.1.2g 3.1.2f 3.2.2a
MA3 3.6	Multiplication with 0 and 1	3.1.2d 3.1.2g

MA3 Outcome 4: Multiplication Facts and Strategies

Outcome Number	Objective	Standard
MA3 4.1	Multiply with 2 and 4 as factors	3.1.2g 3.1.2b
MA3 4.2	Multiply with 5 and 10 as factors	3.1.2g 3.1.2b
MA3 4.3	Learn multiplication facts through the 10's	3.1.2g
MA3 4.4	Use multiplication table to find patterns	3.1.2b
MA3 4.5	Learn to group factors in any order to find the product of three or more numbers	3.1.3c

MA3 4.6	Learn to solve problems that have more than one step	3.1.3c 3.2.2b
MA3 4.7	Use models to explore division	3.1.2b, 3.1.2c 3.2.1b
MA3 4.8	Use arrays to relate multiplication and division	3.1.2g 3.1.2f
MA3 4.9	Write a number sentence to solve a real world problem	3.1.2b 3.2.3a 3.2.3b

MA3 Outcome 5: Understand Division

Outcome Number	Objective	Standard
MA3 5.1	Repeated Subtraction and models	3.1.2c
MA3 5.2	Model division with arrays	3.1.2c 3.1.2f
MA3 5.3	Division Facts	3.1.2g
MA3 5.4	Solve real world problems using divison and multiplication	3.2.3a 3.2.3b

MA3 Outcome 6: Understand Fractions

Outcome Number	Objective	Standard
MA3 6.1	Equal parts of a whole	3.1.1g
MA3 6.2	Divide Models to make equal shares	3.1.1f
MA3 6.3	Use a fraction to name part of a whole	3.1.1g
MA3 6.4	Read write and model fractions that represent more that on part of whole	3.1.1e 3.1.1g
MA3 6.5	Parts of a group	3.1.1g
MA3 6.6	Unit fractions	3.1.1h. 3.1.1g
MA3 6.7	Solve fraction problems by using Draw a Diagram strategy	3.1.1i3.1.1f
MA3 6.9	Learn about figures that are similar	3.2.1b

MA3 Outcome 7: Compare Fractions

Outcome Number	Objective	Standard
MA3 7.1	Solve Comparison problems	3.1.1i
MA3 7.2	Compare fractions with same denominator	3.1.1i
MA3 7.3	Compare fractions with the same numeratorq	3.1.1i
MA3 7.4	Compare and order fractions by using reasoning strategies	3.1.1i

MA3 7.5	Model eqivalanent fractions by folding paper and using number lines	3.1.1d
MA3 7.6	Identify equivalent fractions	3.1.1d 3.1.1e
MA3 7.8	Compare fractions with like denominators	3.1.1i
MA3 7.9	Order like fractions	3.1.1i

MA3 Outcome 8: Time, Length, Liquid Volume, and Mass

Outcome Number	Objective	Standard
MA3 8.1	Read write and tell time to the nearest minute	3.3.3b
MA3 8.2	Decide when to use AM and PM	3.3.3b
MA3 8.3	Use a number line or analog clock to add or subtract time intervals	3.3.3c
MA3 8.4	Measure length to the nearest half or fourth inch and use data in a line plot	3.3.3d 3.4.1b 3.3.3e
MA3 8.5	Estimate and measure liquid volume in liters	3.3.3d
MA3 8.6	Estimate and measure mass in grams and kilograms	3.3.3d
MA3 8.7	Add, subtract, multiply and divide to solve problems involving volumes or masses	3.3.3d

MA3 Outcome 9: Perimeter and Area

Outcome Number	Objective	Standard
MA3 9.1	Explore perimeter of polygons by counting units on grid paper	3.3.3a 3.3.3f3.3.3h
MA3 9.2	Estimate and measure perimeter of polygons using inch rules and centimeter rules	3.3.3a3.3.3d 3.3.3e
MA3 9.3	Find unknown length of a side of a polygon when you know the perimeter	3.3.3a
MA3 9.4	Relate area to addition and multiplication by using area models	3.3.3g

MA3 Outcome 10: Two Dimension Shapes

Outcome Number	Objective	Standard
MA3 10.1	Identify and secribe attributes of plane shapes	3.3.1a
MA3 10.2	Describe angles in plane shapes	3.3.1c
MA3 10.3	Identify polygons by the number of sides	3.3.1a
MA3 10.4	Intersecting, parallel and perpendicular lines	3.3.1a
MA3 10.5	Describe and draw quadrilaterals	3.3.1b

MA3 10.6	Partition shapes into equal areas and express as parts of a whole	3.1.1g3.3.1c
MA3 7.8	Compare fractions with like denominators	3.1.1i
MA3 7.9	Order like fractions	3.1.1i

MA4 Outcome 1: Place Value and Addition and subtraction to one million

Outcome Number	Objective	Standard
MA4 1.1	Read and write whole numbers in standard form, word form and expanded form	4.1.1a
MA4 1.2	Compare and order whole numbers based on value of the digits	4.1.1b4.1.1f`
MA4 1.3	Round a whole number to any place	4.1.1g
MA4 1.4	Rename whole numbers by regrouping	4.1.2a
MA4 1.5	Add whole numbers and determine whether solutions are reasonable	4.1.2h
MA4 1.6	Subtract whole numbers and determine whether solutions are reasonable	4.1.2h
MA4 1.7	Solve comparison problems with addition and subtraction	4.1.2h 4.1.2h

MA4 Outcome 2: Multiply by 1 digit Numbers

Outcome Number	Objective	Standard
MA4 2.1	Relate multiplication equations and comparison statements.	4.1.2
MA4 2.2	Multiply tens hundreds and thousands by 10	4.1.2b
MA4 2.3	Estimate products by rounding and determine if exact answers tp multiplication problems are reasonable	4.1.2a
MA4 2.4	Use the Distributive Property to multiply a two digit number by a 1 digit number	4.1.2c
MA4 2.5	Use expanded form to multiply a multidigit number	4.1.1a 4.1.2b 4.1.2c
MA4 2.6	Use mental math and properties to multiply	4.1.2b 4.1.2c
MA4 2.7	Represent and solve multistep problems	4.2.3a 4.2.2a

MA4 Outcome 3: Multiplication of 2 digit numbers

Outcome Number	Objective	Standard

MA4 3.1	Use place value and multiplication properties to multiply by tens.	4.1.2c 4.1.1a
MA4 3.2	Estimate Products by rounding/compatible numbers	4.1.1g
MA4 3.3	Use area models and partial products to multiply two digit numbers	4.1.1a 4.1.2c
MA4 3.4	Use regrouping to multiply by two digit numbers	4.1.2c
MA4 3.5	Draw a diagram to solve multistep problems	4.1.2 4.2.2a 4.1.3a

MA4 Outcome 4: Division of Whole Numbers

Outcome Number	Objective	Standard
MA4 4.1	Use models to understand division.	4.1.2d
MA4 4.2	Use models to divide whole numbers that do not divide evenly	4.1.2d
MA4 4.3	Use remainders to solve division problems	4.1.2d 4.1.2h
MA4 4.4	Divide tens hundreds and thousands by whole numbers	4.1.2d 4.1.2h
MA4 4.5	Use the distributive property to find quotients	4.1.2d
MA4 4.6	Use repeated subtraction and multiples to find quoitents	4.2.1d
MA4 4.7	Use partial quotients to divide	4.2.1d
MA4 4.8	Model division with partial quotients	4.2.1d
MA4 4.9	Use place value to determine where to place the first digit	4.2.1d
MA4 4.10	Divide multidigit multistep numbers by one divisor	4.2.1d 4.2.3a

MA4 Outcome 5: Factors, multiples and patterns

Outcome Number		Objective	Standard
MA4 5.1		Find all the factors of a number by using models	4.1.1e
MA4 5.2		Determine whether a number is a factor of a given number	4.1.1e
MA4 5.3		Solve problems with common factors by making a list	4.1.1e
MA4 5.4		Understand the relationshiop between factors and multiples and determine wheher a number ios a multiple of a given number	4.1.1e 4.1.1d

MA4 5.5		Generate a number pattern and desribe features of the pattern	4.1.1d 4.1.1e

MA4 Outcome 6:Fraction Equivalence and Comparison

Outcome Number	Objective	Standard
MA4 6.1	Use models to show equivalent fractions	4.1.1i
MA4 6.2	Use multiplication to genterate equivalent fractions	4.1.1i
MA4 6.3	Write and identify equivalent fractions in simplest form	4.1.1i
MA4 6.4	Common denominators	4.1.1k
MA4 6.5	Compare fractions using benchmarks	4.1.1k
MA4 6.6	Compare and order fractions	4.1.1k

MA4 Outcome 7: Fraction Addition and Subtraction

Outcome Number	Objective	Standard
MA4 7.1	Understnad that to add or subtract fracions they must refer to parts of the same whole	4.1.2f4.1.2e
MA4 7.2	Decompose a fraction by writitng it as a sum of fractions ewith the same denominaotrs	4.1.1l
MA4 7.3	Use models to represent and find sums involving fractions	4.1.2f
MA4 7.4	Solve word prolems involving addition and subtration of fractions	4.1.2f
MA4 7.5	Write fractions greater than 1 as a mixed numbers and write mixed numbers as fractions greater than 1	4.1.1j
MA4 7.6	Add and subtract mixed numbers	4.1.1j 4.1.2f
MA4 7.7	Rename mixed numbers to subtract	4.1.2f
MA4 7.8	Use properties of addition to add fractions	4.1.2f
MA4 7.9	Solve miltistep fraction problems	4.1.2 e4.2.3a

MA4 Outcome 8: Multiply Fractions by Whole Numbers

Outcome Number	Objective	Standard
MA4 8.1	Write a fraction as a product of a whole number and a unit fraction	4.1.1l
MA4 8.2	write a product as a whole number and a fraction as a product of a whole number and unit fraction 4.1.1l	4.5.1
MA4 8.3	Use a model to multiply a fraction by a whole number	4.1.2g
MA4 8.4	Multiply a fraction by a whole number to solve a problem	4.1.2g
MA4 8.5	Draw a diagram to solve comparison problems with fractions	4.1.2g

MA4 Outcome 9: Fractions and Decimals

Outcome Number	Objective	Standard
MA4 9.1	Record tenths as fractions and as decimals	4.1.1h4.1.1l 4.1.1f
MA4 9.2	Record hundredths as fractions and as decimals	4.1.1h 4.1.1l 4.1.1f
MA4 9.3	Record tenths and hundredths as fractions and decimals	4.1.1h 4.1.1l 4.1.1f
MA4 9.3	Translate among representations of fractions, decimals and money	4.1.1h`4.1.1l
MA4 9.4	Solve problems using the act it out strategy	4.1.1h
MA 4 9.5	Add fractions when the denominaort is 10 or 100	4.1.1h4.1.2f
MA4 9.6	Compare decimals to hundredths by reasoning thier size	4.1.1k 4.1.1a4.1.1f

MA4Outcome10: Two Dimension Figures

Outcome Number	Objective	Standard
MA4 10.1	Identify and draw points, lines, line segments rays and angles	4.3.1c
MA4 10.2	Classify triangles by the size of their angles	4.3.1e
MA4 10.3	Identify and draw parallel lines and perpendicular lines	4.3.1c4.3.1d
MA4 10.4	Sort and classify quadrilaterals	4.3.1d
MA4 10.5	Determine whether a figure has a line of symmetry	4.3.1h
MA4 10.6	Solve problems with patterns	4.3.1

MA4Outcome 11: Angles

Outcome Number	Objective	Standard
MA4 11.1	Relate angles and fractional parts of a circle	4.3.1a
MA4 11.2	Relate degrees to fractional parts of a circle by understanding that an angle total is 360 of a circle	4.3.1
MA4 11.3	Use a protractor to measure an angle and draw an angle with a given measure	4.3.1f
MA4 11.4	Determine the measure of an angle separtated into parts	4.3.1f4.3.1g

MA4 Outcome 12: Relative Sizes of Measurement Units

Outcome Number	Objective	Standard
MA4 12.1	Use benchmarks to understand the relative sizes of measurement units	4.3.3b
MA4 12.2	Compare customary units of length weight, volume,	4.3.3b 4.3.3c
MA4 12.3	Make and interpret line plots with fractional data	4.1.1a
MA4 12.4	Compare metric units of length, volume, and mass	4.3.3b
MA4 12.5	Use models to compare units of time	4.3.3b
MA4 12.6	Solve elapsed time problems	4.3.3b 4.3.3c
MA4 12.7	Solve problems using mixed measures	4.3.3b 4.3.3c

MA4Outcome 13: Perimeter and Area

Outcome Number	Objective	Standard
MA4 13.1	Use a formula to find the perimeter of a rectangle	4.3.3a
MA4 13.2	Use a formula to find the area of a rectangle	4.3.3a
MA4 13.3	Find the area of combined rectangles	4.3.3a
MA4 13.4	Given perimeter or area, find the unknown measure of a side of a rectangle	4.3.3a
MA4 13.5	Solve a simpler problem strategy	4.2.3b

MA5 Outcome 1: Place Value Multiplication and Expressions

Outcome Number	Objective	Standard
MA5 1.1	Place Value Positions	5.1.1a
MA5 1.2	Relate and write whole numbers through hundred millions	5.1.1a 5.1.1b
MA5 1.3	Use properties of operations to solve problems	5.2.2a
MA5 1.4	write and evaluate repeated factors in expanded form	5.1.1
MA5 1.5	Multiples of 10, 100 and 1000	5.1.1
MA51.6	Multiply by 1 digit numbers	5.1.2a
MA5 1.7	Multiply with Multiple digit numbers	5.1.2a
MA5 1.8	Use multiplication to solve division problems	5.1.2a
MA5 1.9	Write numerical expressions	5.1.1a5.2.2a
MA5 1.10	Use order of operations	5.2.2a
MA5 1.11	Evaluate numerical expressions with parenthese, brackets, and braces	5.2.2a

MA5 Outcome 2: Divide whole numbers

Outcome Number	Objective	Standard
MA5 2.1	Place the first digit in the quotient by estimating or using place value	5.1.2b
MA5 2.2	Divide 3 and 4 digit dividends by 1 digit divisors	5.1.2b
MA5 2.3	Model diviosion with 2 digit divisors using base ten blocks	5.1.2b
MA5 2.4	Use partial quotients	5.1.2b
MA5 2.5	Decide how to use remainders when solving problems	5.1.2b
MA5 2.6	Estimate quotients using compatible numbers	5.1.2b
MA5 2.7	Divide by two digit divisors	5.1.2b
MA5 2.8	Solve division problems and decide when to write a remainder as a fraction	5.1.2b
MA5 2.9	Adjust the quotient if the estimate is too high or too low	5.1.2b
MA5 2.10	Solve problems by using the strategy draw a diagram	5.2.3

MA5 Outcome 3: Add and Subtract Decimals

Outcome Number	Objective	Standard
MA5 3.1	Model read and write decimals to thousandths	5.1.1d 5.1.1b
MA5 3.2	Read and write decimals through thousandths	5.1.2i
MA5 3.3	Compare and order decimals	5.1.1b
MA5 3.4	round decimals to any place	5.1.1c
MA53.5	Decimal Addition	5.1.2g
MA5 3.6	Decimal Subtraction	5.1.2g
MA5 3.7	Make reasonable estimates of decimal sums and differences	5.1.2g 5.1.2i

MA5 Outcome 4: Multiply Decimals

Outcome Number	Objective	Standard
MA54.1	Multiply by Powers of 10	5.1.2j
MA5 4.2	Model Multiplication of whole numbers abd decimals	5.1.2g5.1.2c
MA5 4.3	Multiply a whole number and a decimal using place value	5.1.1a 5.1.2a 5.1.2g
MA5 4.4	Multiply decimals with zeros in the product	5.1.2a

MA5 Outcome 5: Divide Decimals

Outcome Number	Objective	Standard
MA5 5.1	Find Patterns in quotients when dividing by powers of 10	5.1.2b
MA5 5.2	Model division of decimals	5.1.2i 5.1.2b
MA5 5.3	Estimate decimal Quotients	5.1.2i 5.1.2g
MA5 5.4	Divide decimals by whole numbers	5.1.2g
MA5 5.5	Model division by decimals	5.1.2g
MA5 5.6	Place the decimal point in decimal division	5.1.2g
MA5 5.7	Write a zero in the dividend to find a quotient	5.1.2g
MA5 5.8	Solve multistep decimal Problems using working backward	5.1.2g

MA5 Outcome 6: Add and Subtract Fractions with unlike Denominators

MA5 6.1	Use models to add fractions with unlike denominators	5.1.2h
MA5 6.2	Use models to subtract fractions with unlike denominators	5.1.2h
MA5 6.3	Make reasonable estimates of fracrion sums and differences	5.1.2i
MA5 6.4	Find a common denominator to write equivalent fractions	5.1.2.g
MA5 6.5	Use equivalent fractions to add and asubtrct	5.1.2h
MA5 6.6	Rename to find the difference of two mixed numbers	5.1.2h
MA5 6.7	Identify describe and create numeric patterns with fractions	5.1.2
MA5 6.8	Add fractions and mixed numbers wirh unlike denominators using the properites	5.1.2g

MA5 Outcome 7: Multiply and Divide Fractions

MA5 7.1	Model to find fractional part of a group	5.1.2c
MA5 7.2	Model product of a fraction and a whole number	5.1.2b
MA5 7.3	Multiply fractions and whole numbers with our withour models	5.1.2c
MA5 7.4	Multiply two mixed numbers and find area of a triangle	5.1.2c
MA5 7.5	Solve Problems using guess, check and revise	5.1.2t

MA5 7.6	Divide a whole number by a fraction and divide a fraction by a whole number	5.1.2d
MA5 7.7	Interpret a fraction as division and solve whole number problems that result in a fraction or mixed numberser	5.1.2d

MA5 Outcome 8 Patterns and Graphing

Outcome Number	Objective	Standard
MA5 8.1	Make and use line plots with fractions to solve problems	5.4.2a
MA5 8.2	Graph and name points on a coordinate grid using ordered pairs	5.3.2a 5.3.2b 5.2.1a
MA5 8.3	Collect and graph data on a coordinate grid	5.3.2b5.4.2a
MA5 8.4	Analyze and display data in a line graph	5.4.2a
MA5 8.5	Use two rules to generate a numerical pattern and identify the relationship between the corresponding term in the patterns.	5.2.2a 5.2.3a
MA5 8.6	Solve problems using the solve a simpler problem strategy	5.2.3a
MA5 8.7	Graph the relationship between two nemerical patterns pon a coordinate grid	5.2.1a 5.3.2b 5.3.2a

MA5 Outcome 9 : Convert Units of Measure

Outcome Number	Objective	Standard
MA5 9.1	Compare contrast and convert customary units of length, capacity and weight	5.3.3c
MA5 9.2	Convert measurement units to solve multistep problems	5.3.3c 5.2.3a
MA5 9.3	Compare contrast and convert metric units	5.3.3c
MA5 9.4	Solve Problems and customoary and metric conversions using the strategy make a table	5.3.3c5.2.3a
MA5 9.5	Convert units of time to solve elapsed time problems	5.1.1

MA5 Outcome9: Geometry and Volume

Outcome Number	Objective	Standard
MA5 9.1	Identify and classify polygons	5.3.1c
MA5 9.2	Classify and draw triangles	5.3.1c
MA5 9.3	Classify and compare quadrilaterals using their properties	5.3.1c
MA5 9.4	Identify describe and vlassify three dimensional figures	5.3.1a

MA5 9.5	Understand cubic units	5.3.3b
MA5 9.6	Estimate Volume of a rectangular prism	5.3.3a 5.3.3b
MA5 9.7	Find volume of rectangular prisms with and without formula	5.3.3a 5.3.3b

MA6 Outcome1: Whole Numbers and Decimals

Outcome Number	Objective	Standard
MA6 1.1	Fluently divide multidigit numbers	6.1.2c
MA6 1.2	Write the prime factorization of numbers	6.1.1a
MA6 1.3	Find the lease common multiple of two whole numbers	6.1.1a
MA 6 1.4	Solve problems involvong greatet common factor by using the strategy draw a diagram	6.1.1a 6.2.2e
MA6 1.5	Fluently add and subtract multi digit decimals	6.1.2d
MA6 1.6	Fluently multiply and divide decimals	6.1.2d

MA6 Outcome2: Fractions

Outcome Number	Objective	Standard
MA6 2.1	Convert between fractions and decimals	6.1.1d
MA6 2.2	Compare and order fractions and decimals	6.1.1c
MA6 2.3	Multiply fractions	6.1.2a
MA6 2.4	Simplify fractional factors by using the GCF	6.1.1a
MA6 2.5	Divison of fractions and mixed numbers with a model	6.1.2d
MA6 2.6	Solve problems and mixed numbers by applying the use a model strategy	6.1.2d 6.2.3b

MA6 Outcome 3: Rational Numbers

Outcome Number	Objective	Standard
MA6 3.1	Understand postive and negative numbers and use them to represent real world quantities.	6.1.1c
MA6 3.2	Compare and order integers	6.1.1h
MA6 3.3	Plot rational numbers pm a number line to identify opposites	6.3.2b
MA6 3.4	Find and interpret absolute value	6.1.1h, 6.1.1i
MA6 3.5	Interpret comparisons involving absolute values	6.1.1h 6.1.1i
MA6 3.6	Plot ordered pairs of rational numbers on a coordinate plane	6.3.2a-d

MA6 3.7	Identify the relationship between points on a coordinate plane	6.3.2
MA6 3.8	Find horizontal and vertical distances on a coordinate plane	6.3.2e
MA6 3.9	Solve problems on the coordinate plane	6.3.2

MA6 Outcome 4: Ratios and Rates

Outcome Number	Objective	Standard
MA6 4.1	Model ratios	6.1.1f 6.1.1e
MA6 4.2	Write ratios and rates	6.1.1f 6.1.1e
MA6 4.3	Use a multiplication table to find equivalent ratios	6.1.1f
MA6 4.4	Solve Problems uisng find a pattern	6.2.3d
MA6 4.5	Use unit rates to make comparisons and solve problems	6.1.1f 6.2.3d
MA6 4.6	Use a graph to represent equivalent ratios	6.2.3d 6.4.1a

MA6 Outcome5: Percents

Outcome Number	Objective	Standard
MA6 5.1	Use a model toshow percent as a rate per 100	6.2.3d 6.1.1f
MA6 5.2	Write percents as fractions and decimals	6.1.1d
MA6 5.3	Write fractions and decimals as percents	6.1.1d
MA6 5.4	Find a percent of a quantity	6.1.1d

MA6 Outcome 6 Units of Measure

Outcome Number	Objective	Standard
MA6 6.1	Use ratio reasoning to convert from from on unit of length to anthother	6.3.3 6.2.2f
MA6 6.2	Use ratio reasoning to convert from one unit of capacity to another	6.3.3 6.2.2f
MA6 6.3	Use ratio reasoning to convert from one unit of capacity to another	6.3.3 6.2.2f
MA6 6.4	Transform units to solve problems	6.3.36.2.3d

MA6 6.5	Solve problems involving distance, rate, and time and by applying the strategy use the formula	6.3.3c 6.2.3d

MA6 Outcome 7 Expressions

Outcome Number	Objective	Standard
MA6 7.1	Write and evaluate expressions involving exponents	6.2.1a6.1.1a 6.1.2b
MA6 7.2	Use order of operations to evaluate expressions	6.2.2c 6.2.2d
MA6 7.3	Write algebraic expressions	6.2.1a
MA6 7.4	Identify and describe parts of expressions	6.2.1c
MA6 7.5	Evaluate expressions and formulas	6.2.2c
MA6 7.6	Use algebraic expressions to solve problems	6.2.2e
MA6 7.7	Combine like terms	6.2.2a
MA6 7.8	Gererate Equivalent algebraic expressions	6.2.1a 6.2.1b
MA6 7.9	Identify equivalent algebraic expressions	6.2.1b 6.2.2f

MA6 Outcome 8: Equations and Inequalities

Outcome Number	Objective	Standard
MA6 8.1	Determine whether a number is a solution of an equation	6.2.2b
MA6 8.2	Translate between words and equations	6.2.1a
MA6 8.3	Solve addition and subtraction equations	6.2.1
MA6 8.4	Use algebra to solve multiplication and division equations	6.2.1 6.2.2
MA6 8.5	Solve equations involving fractions by using solve a simpler problem	6.2.2e
MA6 8.6	Determine whenther a number is a solution of an inequality	6.2.2g
MA6 8.7	Write algebraic inequalities	6.2.1a
MA6 8.8	Represent solutions of algebraic inequalities on number line diagrams	6.2.2g

MA6 Outcome 9: Relationships between Variables

Outcome Number	Objective	Standard
MA6 9.1	Write an equation to represent the relationship between an independent variable and a dependent variable	6.2.2b
MA6 9.2	Translate between equations and tables	6.2.2f

MA6 9.3	Solve problems involving relationships between quantities	6.2.2f
MA6 9.4	Graph the relationships between two quantities	6.2.2c 6.3.2
MA 6 9.5	Translate between equations and graphs	6.3.2 6.2.2

MA6 Outcome 10: Area

Outcome Number	Objective	Standard
MA6 10.1	Find the area of parallelograms	6.3.3a
MA6 10.2	Investigate the relationship amond the areas of triangles, rectangles, and parallelograms	6.3.3a
MA6 10.3	Find the area of triangles, trapezoids, polygons and composite figures	6.3.3a
MA6 10.4	Determine the effect of changing dimentions on the area of a polygon by using the strategy find the pattern	6.3.3a
MA6 10.5	Plot polygons on a coordinate plane uisng coordinates to find side lengths	6.3.3a6 3.2b 6.3.2e

MA6 Outcome 11: Surface Area and Volume

Outcome Number	Objective	Standard
MA6 11.1	Use nets to represent three dimensional figures	6.3.1a
MA6 11.2	Use nets to recognize that the surface area of a prism is equal to the sumof the areas of its faces	6.3.1a 6.3.3a
MA6 11.3	Find the surface area of prisms and pyramids	6.3.1a 6.3.3a
MA6 11.4	Investigate and use formulas to find the volume of recranular prisms with fractionsal edge lengths	6.3.3b 6.3.1a 6.1.1d 6.1.2a
MA6 11.5	Solve problems involving area, surface area, and volume by applying the strategy use the formula	6.3.3.a 6.3.3b 6.3.3c 6.2.3b-d

MA6 Outcome 12: Data Displays and Measures of Center

Outcome Number	Objective	Standard
MA6 12.1	Recognize statistical questions	6.4.2 a-d
MA6 12.2	Describe a data set by stating wht quantity was measured and how it was measured	6.4.2b
MA6 12.3	Use frequency tables and dot plots to organize data	6.4.1a 6.4.2a
MA6 12.4	Display data in histograms	6.4.2a

MA6 12.5	Understand the mean as a fair share and as a balance point	6.4.2c 6.4.2d
MA6 12.6	Summarize a data set by using mean, median and mode	6.4.2c 6.4.2d
MA6 12.7	Determine the effects of outliers on measures of center	6.4.2b
MA6 12.8	Solve problems involving data	6.4.2 6.2.3
MA6 12.9	Identify, plot and recognize quadrants on coordinate plane	6.3.2a 6.3.2b 6.3.2c 6.3.2d 6.3.2e

MA6 Outcome 13: Variability and Data Distribution

Outcome Number	Objective	Standard
MA6 13.1	Describe overall patterns in data including clusters, peaks, gaps, and symmetry	6.4.2b
MA6 13.2	Display data in box plots	6.4.2a
MA6 13.3	Understand mean absolute deviation as a measure of variability from the mean	6.4.2a-6.4.2 d
MA6 13.4	Summarize a data set by using range, interquartile range and mean absolute deviation	6.4.2c
MA6 13.5	Choose appropriate measures of center and variability indicate about a data set	6.4.2c 6.4.2d
MA6 13.6	Describe the distribution of a data set collected to answer a statistical question	6.4.2c

MA7 Outcome 1: Algebraic Reasoning - (9 Days)

Outcome Number	Objective	Standard
MA7 1.1	Students will be able to use the order of operations to simplify numerical expressions (1 Day)	7.1.2c
MA7 1.2	Students will be able to identify properties of rational numbers and use them to simplify numerical expressions (1 Day)	7.1.2c
MA7 1.3	Students will be able to evaluate algebraic expressions (1 day)	7.2.2c

MA7 1.4	Students will be able to translate words into numbers, variables, and operations (2 days)	7.2.3a
MA7 1.5	Students will be able to simplify algebraic expressions (2 days)	7.2.2b

MA7 Outcome 2: Integers and Rational Numbers - (14 days)

Outcome Number	Objective Fractions and Integers	Standard
MA7 2.1	Students will be able to compare and order integers and determine absolute value (2 days)	7.1.1
MA7 2.2	Students will be able to add integers (2 days)	7.1.2d
MA7 2.3	Students will be able to subtract integers (2 days)	7.1.2d
MA7 2.4	Students will be able to multiply and divide integers (2 days)	7.1.2d
MA7 2.5	Students will be able to solve one-step equations with integers (2 days)	7.2.2a
MA7 2.6	Students will be able to write fractions as decimals, and vice versa, and determine whether a decimal is terminating or repeating (1 Day)	6.1.1d
MA7 2.7	Students will be able to compare and order fractions and decimals (1 day)	6.1.1c

MA7 Outcome 3: Applying Rational Numbers - (13 days)

Outcome Number	Objective Algebra, Proportions, and Percents	Standard
MA7 3.1	Students will be able to add and subtract decimals (1 Day)	7.1.2b
MA7 3.2	Students will be able to multiply decimals (1 day)	7.1.2b
MA7 3.3	Students will be able to divide decimals and integers by decimals (2 days)	7.1.2b
MA7 3.4	Students will be able to solve one-step equations that contain decimals (2 Days)	7.2.2a
MA7 3.5	Students will be able to add and subtract fractions (1 Day)	7.1.2b
MA7 3.6	Students will be able to multiply fractions and mixed numbers (1 day)	7.1.2b
MA7 3.7	Students will be able to divide fractions and mixed numbers (1 Day)	7.1.2b
MA7 3.8	Students will be able to solve one-step equations that contain fractions (2 days)	7.2.2a

MA7 Outcome 4: Proportional Relationships - (12 Days)

Outcome Number	Objective Geometry and Measurement	Standard

MA7 4.1	Students will be able to find and compare unit rates, such as average speed and unit price (1 Day)	7.1.2a
MA7 4.2	Students will be able to find equivalent ratios and identify proportions (1 Day)	7.1.2a
MA7 4.3	Students will be able to solve proportions by using cross products (1 Day)	7.1.2a
MA7 4.4	Students will be able to use ratios to determine if two figures are similar (2 days)	7.2.3f
MA7 4.5	Students will be able to use similar figures to find unknown measures (2 days)	7.2.3f
MA7 4.6	Students will be able to understand ratios and proportions in scale drawings, and use ratios and proportions with scale (2 days)	7.2.3f/7.2.1b

MA7 Outcome 5: Graphs - (8 Days)

Outcome Number	Objective Geometry and Measurement	Standard
MA7 5.1	Students will be able to plot and identify ordered pairs on a coordinate plane (1 Day)	6.3.2
MA7 5.2	Students will be able to relate graphs to situations (1 Day)	6.3.2
MA7 5.3	Students will be able to determine the slope of a line and recognize constant and variable rates of change (2 days)	8.2.1d
MA7 5.4	Students will be able to identify, write, and graph an equation of direct variation (2 Days)	11.2.2g

MA7 Outcome 6: Percents - (12 Days)

Outcome Number	Objective Geometry and Measurement	Standard
MA7 6.1	Students will be able to write decimals and fractions as percents (1 day)	6.1.1d
MA7 6.2	Students will be able to estimate percents(1 day)	7.1.2e
MA7 6.3	Students will be able to use properties of rational numbers to write equivalent expressions and equations (2 days)	7.1.2c
MA7 6.4	Students will be able to solve problems involving percent of change (1 day)	7.2.3e
MA7 6.5	Students will be able to find commision, sales tax, and percent of earnings (2 days)	7.2.3e
MA7 6.6	Students will be able to compute simple interest (2 days)	7.2.3e

MA7 Outcome 7: Collecting, Displaying, and Analyzing Data - (6 Days)

Outcome Number	Objective Geometry and Measurement	Standard

MA7 7.1	Students will be able to find the mean, median, mode and range of a data set (1 Day)	6.4.2c
MA7 7.2	Students will be able to display and analyze data in a box-and-whisker plot (1 Day)	6.4.2a
MA7 7.3	Students will be able to compare and analyze sampling methods (2 Days)	7.4.2

MA7 Outcome 8: Geometric Figures - (12 Days)

Outcome Number	Objective Geometry and Measurement	Standard
MA7 8.1	Students will be able to identify and describe geometric figures (1 Day)	4.3.1c
MA7 8.2	Students will be able to identify angles and angle pairs (1 Day)	7.3.1a
MA7 8.3	Students will be able to identify parallel, perpendicular, and skew lines, and angles formed by a transversal (2 Days)	7.3.1
MA7 8.4	Students will be able to find the measures of angles in polygons (2 days)	8.3.1a/7.3.1 b
MA7 8.5	Students will be able to identify congruent figures and use congruence to solve problems (3 days)	8.3.2b

MA7 Outcome 9: Measurement and Geometry - (14 Days)

Outcome Number	Objective Geometry and Measurement	Standard
MA7 9.1	Students will be able to find the perimeter of a polygon and the circumference of a circle (2 Days)	7.3.3c/4.3.3a
MA7 9.2	Students will be able to find the area of circles (1 Day)	7.3.3c
MA7 9.3	Students will be able to find the area of irregular figures (2 Days)	7.3.3a
MA7 9.4	Students will be able to identify various three-dimensional figures (1 Day)	5.3.1a
MA7 9.5	Students will be able to find the volume of prisms and cylinders (2 Days)	7.3.3b
MA7 9.6	Students will be able to find the surface area of prisms and cylinders (2 Days)	7.3.3b

MA7 Outcome 10: Probability - (16 Days)

Outcome Number	Objective Geometry and Measurement	Standard
MA7 10.1	Students will be able to use informal measures of probability (1 Day)	7.4.3d/7.4.3 h

MA7 10.2	Students will be able to find experimental probability (1 Day)	7.4.3e
MA7 10.3	Students will be able to use counting methods to determine possible outcomes (1 Day)	7.4.3a
MA7 10.4	Students will be able to find the theoretical probability of an event (2 days)	7.4.3b/7.4.3 c
MA7 10.5	Students will be able to use probability to predict events (1 day)	7.4.3f
MA7 10.6	Students will be able to find the probability of independent and dependent events (2 Days)	7.4.3e/7.4.3 g
MA7 10.7	Students will be able to find the number of possible combinations (2 Days)	No Standard
MA7 10.8	Students will be able to find the number of possible permutations (1 Day)	No Standard
MA7 10.9	Students will be able to find probabilities of compound events (2 Days)	7.4.3g

MA7 Outcome 11: Multi-Step Equations and Inequalities - (15 Days)

Outcome Number	Objective Geometry and Measurement	Standard
MA7 11.1	Students will be able to solve two-step equations (2 days)	7.2.2d
MA7 11.2	Students will be able to solve multi-step equations (2 days)	8.2.2a
MA7 11.3	Students will be able to solve equations that have variables on both sides (2 Days)	8.2.2a
MA7 11.4	Students will be able to read and write inequalities and graph them on a number line (1 Day)	7.2.1a
MA7 11.5	Students will be able to solve one-step inequalities by adding and subtracting (1 Day)	7.2.2e
MA7 11.6	Students will be able to solve one-step inequalities by multiplying and dividing (2 Days)	7.2.2e
MA7 11.7	Students will be able to solve simple two-step inequalities (2 Days)	7.2.3d

MA8 Outcome 1: Rational Number Operations

Outcome Number	Objective	Standard
MA8 1.1	Students write rational numbers in equivalent forms.	7.1.2
MA8 1.2	Students multiply fractions, mixed numbers, & decimals.	7.1.2.b
MA8 1.3	Students will divide fractions & decimals.	7.1.2.b
MA8 1.4	Students will add & subtract fractions with unlike denominators.	7.1.2.b
MA8 1.5	Students will solve equations with rational numbers.	7.2.2

MA8 1.6	Students will solve two-step equations.	7.2.2.d

MA8 Outcome 2: Graphs & Functions

Outcome Number	Objective	Standard
MA8 2.1	Students will write solutions of equations in two variables as ordered pairs.	NS
MA8 2.2	Students will graph points on the coordinate plane.	8.3.2
MA8 2.3	Students will interpret information given in a graph and make a graph to model a situation.	8.4.2
MA8 2.4	Students will represent fuctions with tables, graphs, or equations.	8.4.1
MA8 2.5	Students will generate different representations of the same data.	8.4.1

MA8 Outcome 3: Exponents and Roots

Outcome Number	Objective	Standard
MA8 3.1	Students will evaluate expresssions with negative exponents and evaluate the zero exponent.	8.1.2.b
MA8 3.2	Students will apply the properties of exponents.	8.1.2.b
MA8 3.3	Students will express large and small numbers in scientific notation and compare two numbers written in scientific notation.	8.1.2
MA8 3.4	Students will operate with scientific notation in real-world situations.	8.1.2.d
MA8 3.5	Students will find square roots.	8.1.2.a
MA8 3.6	Students will estimate square roots to a given number of decimal places and solve problems using square roots.	8.1.2
MA8 3.7	Students will determine if a number is rational or irrational.	8.1.1.c
MA8 3.8	Students will use the Pythagorean Theorem to solve problems.	8.3.3a 8.3.3b
MA8 3.9	Students will use the Distance Formula and the Pythagorean Theorem and its converse to solve problems.	8.3.3.c

MA8 Outcome 4: Ratios, Proportions, and Similarity

Outcome Number	Objective	Standard
MA8 4.1	Students will work with rates and ratios.	7.1.2.a
MA8 4.2	Students will solve proportions.	7.1.2.a
MA8 4.3	Students will determine whether figures are similar and find missing dimensions in similar figures.	8.3.2.c

MA8 4.4	Students will identify and creat dilations of plane figures.	8.3.2.a

MA8 Outcome 5: Geometric Relationships

Outcome Number	Objective	Standard
MA8 5.1	Students will classify angles and find their measures.	8.3.1
MA8 5.2	Students will identify parallel and perpendicular lines and the angles formed by a transversal.	8.3.1.b
MA8 5.3	Students will find unknown angles and identify possible side lengths in triangles.	8.3.1.a
MA8 5.4	Students will identify polygons and midpoints of segments in the coordinate plane.	8.3.3
MA8 5.5	Students will use properties of congruent figures to solve problems.	8.3.2.b
MA8 5.6	Students will transform plane figures using translations, rotations, & reflections.	8.3.2.a
MA8 5.7	Students will identify transformations as similarity or congruence transformations.	8.3.2.b 8.3.2.c
MA8 5.8	Students will identify the image of a figure after a combined transformation is performed, and determine whether the final image is similar or congruent to the original.	8.3.2.c

MA8 Outcome 6: Measurement and Geometry

Outcome Number	Objective	Standard
MA8 6.1	Students will find the circumference and area of circles.	7.3.3.c
MA8 6.2	Students will find the volume of prisms and cylinders.	8.3.3.d
MA8 6.3	Students will find the volume of pyramids and cones.	8.3.3.d
MA8 6.4	Students will find the volume and surface area of spheres.	8.3.3.d

MA8 Outcome 7: Multi-Step Equations

Outcome Number	Objective	Standard
MA 8.7.1	Students will combine like terms in an expression.	8.2.2
MA 8.7.2	Students will solve multi-step equations.	8.2.2.a
MA 8.7.3	Students will solve equations with variables on both sides of the equal sign.	8.2.2.a
MA 8.7.3b	Students will identify one-variable equations that have one solution, infinitely many solutions, or no solutions.	8.2.1.c
MA 8.7.4	Students will solve systems of equations.	8.2.2

MA8 Outcome 8: Graphing Lines

Outcome Number	Objective	Standard
MA 8.8.1	Students will identify and graph linear equations.	8.2.1
MA 8.8.2	Students will find the slope of a line and use slope to understand and draw graphs.	8.2.1.b
MA 8.8.3	Students will use slopes and intercepts to graph linear equations.	8.2.1.a 8.2.1.b
MA 8.8.4	Students will find the equation of a line given one point and the slope.	8.2.1
MA 8.8.5	Students will recognize direct variation by graphing tables of data and checking for constant ratios.	8.2.1.b 8.2.1.d
MA 8.8.6	Students will graph and solve systems of linear equations.	8.2.1.c

MA8 Outcome 9: Data, Predictions, and Linear Functions

Outcome Number	Objective	Standard
MA8 9.1	Students will creat and interpret scatter plots.	8.4.1.a
MA8 9.2	Students will identify patterns in scatter plots and informally fit and use a linear model to solve problems and make predictions as appropriate.	8.4.1.a 8.4.1.b
MA8 9.3	Students will identify and write linear functions.	8.2.3
MA8 9.4	Students will compare linear functions represented in different ways.	8.1.2.e 8.4.2

MA8 Outcome 10: Data Analysis & Probability

Outcome Number	Objective	Standard
MA8 10.1	Make and interpret stem-and-leaf plots	8.2.5
MA8 10.2	Construct and interpret box-and-whisker plots	8.2.5
MA8 10.3	Organize data using circle graphs and line graphs	8.2.4
MA8 10.4	Use counting methods to count the number of choices	8.4.1
MA8 10.5	Use permutations to count possibilities	
MA8 10.6	Use combinations to count possibilities	8.2.5
MA8 10.7	Find the odds in favor of events	8.2.5
MA8 10.8	Independent/Dependent Events	8.2.5

MAI Outcome 1: Connections to Algebra - (16 Days)

Outcome Number	Objective	Standard

MAI 1.1	Students will be able to evaluate vairable expressions (1 Day)	11.2.2e
MAI 1.2	Students will be able to evaluate a power (1 day)	11.2.2e
MAI 1.3	Students will be able to use the established order of operations (2 days)	11.1.2c
MAI 1.4	Students will be able to check solutions of equations and inequalities (1 Day)	11.1.2c
MAI 1.5	Students will be able to translate words into mathematical symbols (2 Days)	11.1.1c
MAI 1.6	Students will be able to model and solve real-life problems (2 days)	11.2.3a
MAI 1.7	Students will be able to organize data using a table or graph (2 Days)	11.2.3a
MAI 1.8	Students will be able to use four different ways to represent functions (2 Days)	11.2.1a

MAI Outcome 2: Properties of Real Numbers - (18 Days)

Outcome Number	Objective	Standard
MAI 2.1	Students will be able to graph, compare, and order real numbers (1 day)	11.1.1a
MAI 2.2	Students will be able to find the opposite and the absolute value of a number (2 Days)	7.1.2c
MAI 2.3	Students will be able to add real numbers using a number line or the rules of addition (2 days)	11.1.2a
MAI 2.4	Students will be able to subtract real numbers using the subtraction rule (2 Days)	11.1.2a
MAI 2.5	Students will be able to multiply real numbers using the rule for the sign of a product (1 Day)	11.1.2a
MAI 2.6	Students will be able to use the distributive property (2 Days)	11.2.2b
MAI 2.7	Students will be able to simiplify an expression by combining like terms (2 Days)	11.2.2c
MAI 2.8	Students will be able to divide real numbers and use division to simplify algebraic expressions (2 Days)	11.2.2c
EXT	Students will be able to identify inductive and deductive reasnoning (1 Day)	No stanadard

MAI Outcome 3: Solving Linear Equations - (20 Days)

Outcome Number	Objective	Standard

MAI 3.1	Students will be able to solve linear equations using addition and subtraction (1 Day)	11.2.2g
MAI 3.2	Students will be able to solve linear equations using multiplication and division (1 Day)	11.2.2g
MAI 3.3	Students will be able to use two or more steps to solve a linear equation (2 Days)	11.2.2g
MAI 3.4	Students will be able to solve equations that have variables on both sides (2 Days)	11.2.2g
MAI 3.5	Students will be able to solve more complicated equations that have variables on both sides (2 Days)	11.2.2g
MAI 3.6	Students will be able to find exact and approximate solutions of equations that contain decimals (2 Days)	11.2.2g
MAI 3.7	Students will be able to solve a formula for one of its variables (3 days)	11.2.2f
MAI 3.8	Students will be able to use ratios and rates to solve real-life problems (2 days)	11.2.2a
MAI 3.9	Students will be able to solve perent problems (2 days)	11.2.3a

MAI Outcome 4: Graphing Linear Equations and Functions - (18 Days)

Outcome Number	Objective	Standard
MAI 4.1	Students will be able to plot points in a coordinate plane (1 Day)	6.3.2b
MAI 4.2	Students will be able to graph a linear equation using a table of values (2 days)	11.2.1e
MAI 4.3	Students will be able to graph horizontal and vertical lines (2 Days)	11.2.1e
MAI 4.4	Students will be able to find the intercepts of the graph of a linear equation and then use them to make a quick graph of the equation (2 Days)	11.2.1e
MAI 4.5	Students will be able to find the slope of a line (2 days)	8.2.1d
MAI 4.6	Students will be able to write and graph equations that represent direct variation (2 days)	11.2.1e
MAI 4.7	Students will be able to graph a linear equation in slope-intercept form (2 days)	11.2.1e
MAI 4.8	Students will be able to decide whether a relations is a function and use function notation (2 Days)	11.2.1a

MAI Outcome 5: Writing Linear Equations - (18 Days)

Outcome Number	Objective	Standard

MAI 5.1	Students will be able to use slope-intercept form to write an equation of a line (3 days)	11.2.1e
MAI 5.2	Students will be ablle to use point-slope form to write the equation of a line (3 days)	11.2.1e
MAI 5.3	Students will be able to write an equation of a line given two points on the line (2 days)	11.2.1e
MAI 5.4	Students will be able to write an equation of a line in standard form (3 Days)	11.2.1e
MAI 5.5	Students will be able to write and use a linear equation to solve a real-life problem (2 days)	11.2.3a
MAI 5.6	Students will be able to write equations of perpendicular lines (2 days)	11.2.1e

MAI Outcome 6: Solving and Graphing Linear Inequalities - (20 Days)

Outcome Number	Objective	Standard
MAI 6.1	Students will be able to solve and graph one -step inequalities in one variable using addition or subtraction (1 Day)	7.2.2e
MAI 6.2	Students will be able to solve and graph one-step inequalities in one variable using multiplication or division (2 days)	7.2.2e
MAI 6.3	Students will be able to solve muli-step inequalities in one variable (2 days)	8.2.2b
MAI 6.4	Students will be able to solve and graph compound inequalities involvindg and (2 Days)	11.2.2g
MAI 6.5	Students will be able to solve and graph compound inequalities involving or (2 Days)	11.2.2g
MAI 6.6	Students will be able to solve absolute-value equations in one variable (3Days)	11.2.2g
MAI 6.7	Students will be able to solve absolute value inequalities in one variable (3 days)	11.2.2g
MAI 6.8	Students will be able to graph linear inequalities in two variables (3 days)	11.2.1e

MAI Outcome 7: Systems of Linear Equations and Inequalities - (20 Days)

Outcome Number	Objective	Standard
MAI 7.1	Students will be able to estimate the solution of a system of linear equations by graphing (3 Days)	11.2.2h
MAI 7.2	Students will be able to solve a linear system by substitution (3 days)	11.2.2h

MAI 7.3	Students will be able to solve a system of linear equations by linear combinations (3 Days)	11.2.2h
MAI 7.4	Students will be able to use the linear systems to solve real-life problems (2 days)	11.2.3a
MAI 7.5	Students will be able to identify how many solutions a linear system has (2 days)	11.2.2h
MAI 7.6	Students will be able to graph a system of linear inequalities (3 days)	11.2.2h

MAII Outcome 8: Exponents and Exponential Functions - (18 Days)

Outcome Number	Objective	Standard
MAII 8.1	Students will be able to use multiplication properties of exponents (2 Days)	11.2.2c
MAII 8.2	Students will be able to evaluate powers that have zero or negative exponents (2 Days)	11.2.2c
MAII 8.3	Students will be able to graph an exponential function (2 Days)	11.2.3a
MAII 8.4	Students will be able to use division properties of exponents (2 Days	11.2.2c
MAII 8.5	Students will be able to read and write numbers in scientific notation (2 Days)	11.2.2c
MAII 8.6	Students will be able to write and graph exponential growth functions (2 days)	11.2.3a
MAII 8.7	Students will be able to write and graph exponential decay functions (2 days)	11.2.3a

MAII Outcome 9: Quadratic Equations and Functions - (24 Days)

Outcome Number	Objective	Standard
MAII 9.1	Students will be able to evaluate and approximate square roots (2 Days)	11.1.2a
MAII 9.2	Students will be able to solve a quadratic equation by finding square roots (2 Days)	11.2.2n
MAII 9.3	Students will be able to simplify radical expressions (2 Days)	11.2.2c
MAII 9.4	Students will be able to sketch the grapoh of a quadratic functions (3 Days)	11.2.1g
MAII 9.5	Students will be able to use a graph to find or check a solution of a quadratic equation (2 days)	11.2.2n
MAII 9.6	Students will be able to use the quadratic formula to solve a quadratic equation (3 Days)	11.2.2n

MAII 9.7	Students will be able to use the discriminant to determine the number of solutions of a quadratic equation (3 Days)	11.2.2n
MAII 9.8	Students will be able to sketch the graph of a quadratic inequality in two variables (4 days)	AT

MAII Outcome 10: Polynomials and Factoring - (24 Days)

Outcome Number	Objective	Standard
MAII 10.1	Students will be able to add and subtract polynomials (2 Days)	11.2.2i
MAII 10.2	Students will be able to multiply polynomials (3 Days)	11.2.2i
MAII 10.3	Students will be able to use special product patterns to multiply polynomials (2 days)	11.2.2k
MAII 10.4	Students will be able to solve quadratic equations in factored form (2 days)	11.2.2n
MAII 10.5	Students will be able to factor trinomials of the form x^2+bx+c (3 DAys)	11.2.2j
MAII 10.6	Students will be able to factor trinomials of the form ax^2+bx+c (3 Days)	11.2.2j
MAII 10.7	Students will be able to factor special products (2 days)	11.2.2j
MAII 10.8	Students will be able to factor cubic polynomials (3 DAys)	11.2.2j

MAII Outcome 11: Rational Expressions and Equations - (24 days)

Outcome Number	Objective	Standard
MAII 11.1	Students will be able to solve proportions (1 day)	11.2.2a
MAII 11.2	Students will be able to use direct and inverse variation (2 Days)	11.2.1h
MAII 11.3	Students will be able to simplify rational expressions (3 Days)	11.2.2c
MAII 11.4	Students will be able to multiply and divide rational expressions (3 days)	11.2.2d
MAII 11.5	Students will be able to add and subtract rational expressions with like denominators (2 Days)	11.2.2d
MAII 11.6	Students will be able to add and subtract rational expressions with unlike denominators (3 days)	11.2.2d
MAII 11.7	Students will be able to solve rational equations (4 days)	11.2.2d

Ext	Students will be able to perform operations on rational functions (2 days)	11.2.2d

MAII Outcome 12: Radicals and More Connections to Geometry - (32 Days)

Outcome Number	Objective	Standard
MAII 12.1	Students will be able to evaluate and graph a function involving square roots (2 days)	11.2.2e
MAII 12.2	Students will be able to add, subtract, multiply, and divide radical expressions (3 days)	11.2.2d
MAII 12.3	Students will be able to solve radical equations (3 days)	AT
MAII 12.4	Students will be able to evaluate expressions involving rational exponents (3 days)	11.2.2e
MAII 12.5	Students will be able to solve a quadratic equation by completing the square (3 days)	11.2.2n
MAII 12.6	Students will be able to use the Pythagorean Theorem and its converse (4 Days)	8.3.3b/11.3.1d
MAII 12.7	Students will be able to find the distance between two points in a coordinate plane (4 days)	11.3.2d
MAII 12.8	Students will be able to find the midpoint of a line segment in a coordinate plane (3 days)	11.3.2a
MAII 2.9	Students will be able to use logical reasoning and proof to prove that a statement is true or false (3 days)	11.4.2d

MAIII Outcome 1: Basics of Geometry

Outcome Number	Objective	Standard
MAII 1.1	Find patterns and use them to make predictions	12.1.4
MAII 1.2	Use inductive reasoning to make conjectures	12.2.1b
MAII 1.3	Use postulates and undefined terms	12.2.1
MAII 1.4	Sketch simple figures and their intersections	12.3.2
MAII 1.5	Measure segments, add segment lengths	12.2.2
MAII 1.6	Measure and classify angles, add angle measures	12.2.1

MAIII Outcome 2: Segments and Angles

Outcome Number	Objective	Standard
MAII 2.1	Bisect a segment, find coordinates of midpoint of segment	12.2.4
MAII 2.2	Bisect an angle	12.2.4
MAII 2.3	Find measure of complementary and supplementary angles	12.2.1
MAII 2.4	Find measures of angles formed by intersecting lines	12.2.1
MAII 2.5	Use if then statements , apply laws of logic	12.2.1

MAII 2.6	Use properties of equality and congruence	12.2.1

MAIII Outcome 3: Parallel and Perpendicular lines

Outcome Number	Objective	Standard
MAII 3.1	Identify relationships between lines	12.2.1
MAII 3.2	Use theorems about perpendicular lines	12.2.1
MAII 3.3	Identify angles formed by transversals	12.2.1
MAII 3.4	Find congruent angles formed when a transversal cuts parallel lines	12.2.1
MAII 3.5	Show two lines are parallel	12.2.1
MAII 3.6	Construct parallel and perpendicular line, use properties	12.2.4
MAII 3.7	Identify and use translations	12.2.3

MAII Outcome 4: Triangle Relationships

Outcome Number	Objective	Standard
MAII 4.1	Classify triangles by their sides and by their angles	12.2.1
MAII 4.2	Find angle measures in triangles	12.2.1
MAII 4.3	Use properties of isosceles and equilateral triangles	12.2.1
MAII 4.4	Use Pythagorean Theorem and the Distance Formula	12.2.2
MAII 4.5	Use Converse of Pythagorean Theorem, use die lengths to classify triangles	12.2.2
MAII 4.6	Identify medians in triangles	12.2.1
MAII 4.7	Use triangle measurement to decide which side is longest and which angle is largest	12.2.1

MAII Outcome 5: Congruence and Triangles

Outcome Number	Objective	Standard
MAII 5.1	Identify congruent triangles and corresponding parts	12.2.1
MAII 5.2	Show triangles are congruent using SSS, SAS,	12.2.1
MAII 5.3	Show triangles are congruent using ASA and AAS	12.2.1
MAII 5.4	Use the HL Congruence Theorem and summarize congruence postulates and theorems	12.2.1
MAII 5.5	Show corresponding parts of congruent triangles are congruent	12.2.1
MAII 5.6	Use angle bisectors and perpendicular bisectors	12.2.4
MAII 5.7	Identify and use reflections and lines of symmetry	12.2.3

MAII Outcome 6: Quadrilaterals

Outcome Number	Objective	Standard
MAII 6.1	Identify and classify polygons	12.2.1
MAII 6.2	Find angle measures of quadrilaterals	12.2.1
MAII 6.3	Use Properties of parallelograms	12.2.1
MAII 6.4	Show a quadrilateral is a parallelogram	12.2.1
MAII 6.5	Use properties of special types of parallelograms	12.2.1
MAII 6.6	Use properties of trapezoids	12.2.1
MAII 6.7	Identify special quadrilaterals based on limited information	12.2.1

MAII Outcome 7: Similarity

Outcome Number	Objective	Standard
MAII 7.1	Use ratios and proportions	12.2.1
MAII 7.2	Identify similar polygons	12.2.1
MAII 7.3	Show 2 triangles are similar using AA Similarity Postulate	12.2.1
MAII 7.4	Show 2 triangles are similar using SSS and SAS	12.2.1
MAII 7.5	Use Triangle Proportionality Theorem and its converse	12.2.1
MAII 7.6	Identify and draw dilations	12.2.5

MAII Outcome 8: Polygons and Area

Outcome Number	Objective	Standard
MAII 8.1	Describe polygons	12.2.4
MAII 8.2	Find measure of interior and exterior angles of polygons	12.2.1
MAII 8.3	Find area of squares and rectangles	12.2.5
MAII 8.4	Find area of triangles	12.2.5
MAII 8.5	Find area of parallelograms	12.2.5
MAII 8.6	Find area of trapezoids	12.2.5
MAII 8.7	Find circumference and area of circles	12.2.5

MAII Outcome 9: Surface Area and Volume

Outcome Number	Objective	Standard
MAII 9.1	Identify and name solid figures	12.2.4
MAII 9.2	Find surface areas of prisms and cylinders	12.2.5
MAII 9.3	Find Surface area of pyramids and cones	12.2.5

MAII 9.4	Find volumes of prisms and cylinders	12.2.5
MAII 9.5	Find volumes of pyramids and cones	12.2.5
MAII 9.6	Find Surface area and volumes of spheres	12.2.5

MAII Outcome 10: Right Triangles and Trigonometry

Outcome Number	Objective	Standard
MAII 10.1	Simplify square roots	12.1.3
MAII 10.2	Find the side lengths of 45-45-90 triangles	12.2.2
MAII 10.3	Find side lengths of 30-36-90 triangles	12.2.2
MAII 10.4	Find tangent of acute angles	12.2.1
MAII 10.5	Find the sin and cos of acute angles	12.2.1
MAII 10.6	Solve a right triangle	12.2.1

MAII Outcome 11: Circles

Outcome Number	Objective	Standard
MAII 11.1	Identify segments and lines related to circles	12.2.1
MAII 11.2	Use properties of a tangent to a circle	12.2.1
MAII 11.3	Use properties of arcs of circles	12.2.1
MAII 11.4	Use properties of chords of circles	12.2.1
MAII 11.5	Use properties of inscribed angles	12.2.1
MAII 11.6	Use properties of chords of a circle	12.2.1
MAII 11.7	Write and graph the equation of a circle	12.2.1
MAII 11.8	Identify rotations and rotational symmetry	12.2.1

MAIII Outcome 1: Numeration and Number Sense

Outcome Number	Objective	Standard
MAIII 1.1	Students will describe and compare the relationships between subsets of real numbers	12.1.1
MAIII 1.2	Students will express the equivalent forms of numbers using exponents, radicals, scientific notation, absolute values, fractions, decimals, and percents	12.1.2

MAIII Outcome 2: Computation/Estimation

Outcome Number	Objective	Standard

MAIII 2.1	Students will solve theoretical and applied problems using numbers in equivalent forms, radicals, exponents, scientific notation, absolute values, fractions, decimals, and percents, ratios and proportions, order of operations, and properties of real numbers	12.2.1
MAIII 2.2	Students will perform estimations and computations of real numbers mentally, with paper and pencil, and with technology	12.3.2

MAIII Outcome 3: Measurement

Outcome Number	Objective	Standard
MAIII 3.1	Students will select and use measuring units, tools, and/or technology and explain the degree of accuracy and precision of measurements	12.3.1
MAIII 3.2	By the end of twelfth grade, students will convert between metric and standard units of measurement, given conversion factors	12.3.2

MAIII Outcome 4: Geometry/Spatial Concept

Outcome Number	Objective	Standard
MAIII 4.1	Students will calculate perimeter and area of two-dimensional shapes and surface area and volume of three-dimensional shapes	12.4.1
MAIII 4.2	Students will create geometric models to describe the physical world	12.4.2
MAIII 4.3	Students will evaluate characteristics and properties of two- and three-dimensional geometric shapes	12.4.3
MAIII 4.4	Students well apply coordinate geometry to locate and describe objects algebraically	12.4.4
MAIII 4.5	Students will apply right triangle trigonometry to find length and angle measures	12.4.5
MAIII 4.6	Students well apply geometric properties to solve problems	12.4.6
MAIII 4.7	Students will apply deductive reasoning to arrive at a conclusion	12.4.7

MAIII Outcome 5: Data Analysis, Probability, and Statistical Concepts

Outcome Number	Objective	Standard
MAIII 5.1	Students will select a sampling technique t gather data, analyze the resulting data and make inferences	12.5.1

MAIII 5.2	Students will write equations and make predictions from sets of data	12.5.2
MAIII 5.3	Students will apply theoretical probability to represent problems and make decisions	12.5.3
MAIII 5.4	Students will evaluate how transformations on data affect the measures of central tendency and variability	12.5.4
MAIII 5.5	Students will interpret data represented by the normal distribution and formulate conclusions	12.5.5
MAIII 5.6	Students will calculate probabilities of independent events.	12.5.6

MAIII Outcome 6: Algebraic Concepts

Outcome Number	Objective	Standard
MAIII 6.1	Students will graph and interpret algebraic relations and inequalities	12.6.1
MAIII 6.2	Students will solve problems involving equations and inequalities	12.6.2
MAIII 6.3	Students will solve problems involving systems of two equations, and systems of two or more inequalities	12.6.3
MAIII 6.4	Students will solve problems using patterns and functions	12.6.4

MAALG1 Outcome 1: Equations - (24 Days)

Outcome Number	Objective	Standard
MAALG1 1.1a	Students will be able to translate between words and algebra (2 Days)	8.2.1a
MAALG1 1.1b	Students will be able to evaluate algebraic expressions	11.2.2e/11.2.2b
MAALG1 1.2	Students will be able to solve one-step equations in one variable by using addition and subtraction (1 Day)	7.2.2/11.2.2b
MAALG1 1.3	Students will be able to solve one-step equations in one variable by using multiplication or division (2 Days)	7.2.2/11.2.2b
MAALG1 1.4	Students will be able to solve equations in one variable that contain more than one operation (2 Days)	11.2.2g
MAALG1 1.5	Students will be able to solve equations in one variable that contain variable terms on both sides (2 Days)	11.2.2g
MAALG1 1.6a	Students will be able to solve a formula for a given variable (3 Days)	11.2.2f
MAALG1 1.6b	Students will be able to solve an equation in two or more variables for one of the variables	11.2.2f
MAALG1 1.7	Students will be able to solve equations in one variable that contain absolute-value expressions (2 Days)	11.2.2g

MAALG1 1.8a	Students will be able to write and use ratios, rates, and unit rates (2 DAys)	11.2.2a
MAALG1 1.8b	Students will be able to write and solve proportions	11.2.2a
MAALG1 1.9a	Students will be able to use proportions to solve problems involving geometric figures (2 Days)	11.3.1c
MAALG1 1.9b	Students will be able to use proportions and similar figures to measure objects indirectly	11.3.1c
MAALG1 1.10a	Students will be able to analyze and compare measurements for precision and accuracy	No Standard
MAALG1 1.10b	Students will be able to choose an appropriate level of accuracy when reporting measurements (2 Days)	No Standard

MAALG1 Outcome 2: Inequalities - (16 Days)

Outcome Number	Objective	Standard
MAALG1 2.1a	Students will be able to identify solutions of inequalities in one variable (1 Day)	7.2.2e
MAALG1 2.1b	Students will be able to write and graph inequalities in one variable	7.2.1a
MAALG1 2.2a	Students will be able to solve one-step inequalities by using addition (1 Day)	7.2.2e
MAALG1 2.2b	Students will be able to solve one-step inequalities by using subtraction	7.2.2e
MAALG1 2.3a	Students will be able to solve one-step inequalities by using multiplication (1 Day)	7.2.2e
MAALG1 2.3b	Students will be able to solve one-step inequalities by using division	7.2.2e
MAALG1 2.4	Students will solve inequalities that contain more than one operation (2 Days)	8.2.2b
MAALG1 2.5	Students will solve inequalities that contain variable terms on both sides (2 Days)	11.2.2g
MAALG1 2.6a	Students will be able to solve compound inequalities in one variable (2 Days)	11.2.2g
MAALG1 2.6b	Students will be able to graph solution sets of compound inequalities in one variable	11.2.2g
MAALG1 2.7	Students will be able to solve inequalitiesin one variable involving absolute value expressions (3 Days)	11.2.2g

MAALG1 Outcome 3: Functions - (16 Days)

Outcome Number	Objective	Standard

MAALG1 3.1a	Students will be able to match simple graphs with situations (1 Day)	11.2.1e
MAALG1 3.1b	Students will be able to graph a relationship	11.2.1e
MAALG1 3.2a	Students will be able to identify functions (2 DAys)	11.2.1a
MAALG1 3.2b	Students will be able to find the domain and range of relations and functions	11.2.1d
MAALG1 3.3a	Students will be able to identify independent and dependent variables (3 Days)	11.2.1a
MAALG1 3.3b	Students will be able to write an equation in function notation and evaluate a function for given input values	11.2.1a/11.2.2e
MAALG1 3.4a	Students will be able to graph functions given a limited domain (2 Days)	11.2.1e
MAALG1 3.4b	Students will be able to graph functions given a domain of all real numbers	11.2.1e
MAALG1 3.5a	Students will be able to create and interpret scatter plots (2 Days)	11.4.2i
MAALG1 3.5b	Students will be able to use trend lines to make predictions	11.4.2i
MAALG1 3.6a	Students will be able to recognize and extend an arithmetic sequence	No Standard
MAALG1 3.6b	Students will be able to find a given term of an arithmetic sequence (2 Days)	No Standard

MAALG1 Outcome 4: Linear Functions - (28 Days)

Outcome Number	Objective	Standard
MAALG1 4.1a	Students will be able to identify linear functions and linear equations (2 DAys)	11.2.1b
MAALG1 4.1b	Students will be able to graph linear functions that represent real-world situations and give their domain and range	11.2.1e/11.2.1d
MAALG1 4.2a	Students will be able to find x- and y-intercepts and interpret their meanings in real-world situations (2 Days)	11.2.1e
MAALG1 4.2b	Students will be able to use x-and y-intercepts to graph lines	11.2.1e
MAALG1 4.3a	Students will be able to find rates of change and slopes (2 Days)	11.2.1e
MAALG1 4.3b	Students will be able to relate a constant rate of change to the slope of a line	11.2.1e
MAALG1 4.4	Students will be able to find slope by using the slope formula (2 Days)	8.2.1d
MAALG1 4.5	Students will be able to identify, write and graph direct variation (2 Days)	11.2.1e

MAALG1 4.6a	Students will be able to write a linear equation in slope-intercept form (2 Days)	11.2.1e
MAALG1 4.6b	Students will be able to graph a line using slope-intercept form	11.2.1e
MAALG1 4.7a	Students will be able to graph a line and write a linear equation using point-slope form (3 days)	11.2.1e
MAALG1 4.7b	Students will be able to write a linear equation given two points	11.2.1e
MAALG1 4.8a	Students will be able to determine a line of best fit for a set of linear data (3 Days)	11.4.2e
MAALG1 4.8b	Students will be able to determine and interpret the correlation coefficient	11.4.2e
MAALG1 4.9a	Students will be able to identify and graph parallel and perpendicular lines (3 Days)	11.3.2b/11.3.2c
MAALG1 4.9b	Students will be able to write equations to describe lines parallel or perpendicular to a given line	11.3.2b/11.3.2c
MAALG1 4.10	Students will be able to describe how changing slope and y-intercept affect the graph of a linear function (2 DAys)	11.2.1e
MAALG1 Ext	Students will be able to graph absolute value functions and to identidy characteristics of absolute value functions and their graphs (2 DAys)	11.2.1f

MAALG1 Outcome 5: Systems of Equations and Inequalities - (18 Days)

Outcome Number	Objective	Standard
MAALG1 5.1a	Students will be able to identify solutions of systems of linear equations in two variables (2 Days)	11.2.2h
MAALG1 5.1b	Students will be able to solve systems of linear equations in two variables by graphing	11.2.2h
MAALG1 5.2	Students will be able to solve systems of linear equations in two variables by substitution (2 Days)	11.2.2h
MAALG1 5.3a	Students will be able to solve systems of linear equations in two variables by elimination (2 Days)	11.2.2h
MAALG1 5.3b	Students will be able to compare and choose an appropriate method for solving systems of linear equations	11.2.2h
MAALG1 5.4a	Students will be able to solve special systems of linear equations in two variables (3 Days)	11.2.2h
MAALG1 5.4b	Students will be able to classify systems of linear equations and determine the number of solutions	11.2.2h
MAALG1 5.5	Students will be able to graph and solve linear inequalities in two variables (2 Days)	11.2.2h
MAALG1 5.6	Students will be able to graph and solve systems of linear inequalities in two variables (3 days)	11.2.2h

MAALG1 Outcome 6: Exponents and Polynomials - (20 Days)

Outcome Number	Objective	Standard
MAALG1 6.1a	Students will be able to evaluate expressions containing zero and integer exponents (2 days)	11.2.2e
MAALG1 6.1b	Students will be able to simplify expressions containing zero and integer exponents	11.2.2c
MAALG1 6.2	Students will be able to evaluate and simplify expressions containing rational exponents (2 Days)	11.2.2c/11.2.2e
MAALG1 6.3a	Students will be able to classify polynomials and write polynomials in standard form (2 Days)	No Standard
MAALG1 6.3b	Students will be able to evaluate polynomial expressions	11.2.2e
MAALG1 6.4	Students will be able to add and subtract polynomials (3 Days)	11.2.2i
MAALG1 6.5	Students will be able to multiply polynomials (3 Days)	11.2.2i
Extension	Students will be able to identify sets and the opeartions under which they are close (2 days)	11.1.1b
MAALG1 6.6	Students will be able to find special products of binomials (2 Days)	11.2.2i

MAALG1 Outcome 7: Factoring Polynomials - (16 DAys)

Outcome Number	Objective	Standard
MAALG1 7.1a	Students will be able to write the prime factorization of numbers (1 Day)	11.2.2j
MAALG1 7.1b	Students will be able to find teh GCF of monomials	11.2.2j
MAALG1 7.2	Students will be able to factor polynomials by using the greatest common factor (2 Days)	11.2.2j
MAALG1 7.3	Students will be able to factor trinomials of the form x2+bx+c (2 Days)	11.2.2j
MAALG1 7.4	Students will be able to factor trinomials of the form ax2+bx+c (3 Days)	11.2.2j
MAALG1 7.5a	Students will be able to factor perfect square trinomials (2 Days)	11.2.2k
MAALG1 7.5b	Students will be able to factor the difference of two squares	11.2.2k
MAALG1 7.6a	Students will be able to choose an appropriate method for factoring a polynomial (2 DAys)	11.2.2j
MAALG1 7.6b	Students will be able to combine methods for factoring a polynomial	11.2.2j

MAALG1 Outcome 10: Data Analysis and Probability - (18 Days)

Outcome Number	Objective	Standard
MAALG1 10.1a	Students will organize data in tables and graphs (2 DAys)	6 Grade
MAALG1 10.1b	Students will choose a table or graph to display data	7.4.1
MAALG1 10.2a	Students will create a stem-and-leaf plots (1 Day)	6 grade
MAALG1 10.2b	Students will be able to create frequency tables and histograms	6th grade
MAALG1 10.3a	Students will be able to describe the central tendency of a data set (2 DAys)	11.4.2a/11.4 .2b
MAALG1 10.3b	Students wil be able to create and interpret box-and-whisker plots	6th grade
MAALG1 10.4a	Students will be able to recognize misleading graphs (2 Days)	11.4.2
MAALG1 10.4b	Students will be able to recognize misleading statistics	11.4.2j
MAALG1 10.5a	Students will be able to determine the experimental probabliity of an event (2 Days)	11.4.3b/11.4 .3a
MAALG1 10.5b	Students will be able to use experimental probablity to make predictions	11.4.3
MAALG1 10.6a	Students will be able to determine the theoretical probability of an event(2 DAys)	11.4.3b
MAALG1 10.6b	Students will be able to convert between probabilities and odds	11.4.3
MAALG1 10.7a	Students will be able to find the probability of independent events(3 DAys)	11.4.3
MAALG1 10.7b	Students will be able to find the probability of dependent events	11.4.3

MAALG1 Outcome 8: Quadratic Functions and Equations - (30 Days)

Outcome Number	Objective	Standard
MAALG1 8.1a	Students will be able to identify quadratic functions and determine whether they have a maximum or minimum (2 DAys)	11.2.1g
MAALG1 8.1b	Students will be able to graph a quadratic functions and give its domain and range	11.2.1g/11.2 .1d
MAALG1 8.2a	Students will be able to find the zeros of a quadratic function from its graph (3 Days)	11.2.1g
MAALG1 8.2b	Students will be able to find the axis of symmetry and the vertex of a parabola	11..2.1g
MAALGI 8.3	Students will be able to graph a quadratic function in the form y = ax2+bx+c (3 DAys)	11.2.1g

MAALG 8.4	Students will be able to graph and transform quadratic functions (3 Days)	11.2.1g
MAALG1 8.5	Students will be able to solve quadratic equations by graphing (2 DAys)	11.2.2n
MAALG1 8.6	Students will be able to solve quadratic equations by factoring (2 Days)	11.2.2n
MAALG1 8.7	Students will be able to solve quadratic equations by using square roots (2 Days)	11.2.2n
MAALG1 8.8	Students will be able to solve quadratic equations by completing the square (3 Days)	11.2.2n
MAALG1 8.9a	Students will be able to solve quadratic equations by using the quadratic formula (3 Days)	11.2.2n
MAALG1 8.9b	Students will be able determine the number of solutions of a quadratic equation by using the discriminant	11.2.2n
MAALG1 8.10	Students will be able to solve systems of equations in two variables in which one equation is linear and the other is quadratic (3 Days)	No Standard

MAALG2 Outcome 1: Function Foundations: (9 Days)

Outcome Number	Objective	Standard
MAALG2 1.1	Students will be able to interpret transformations and apply transformations of points and set of points (2 Days)	11.2.3a/12.2.1a
MAALG2 1.2	Students will be able to identify parent functions from graphs and equations. Use parent functions to model real-world data and make estimates for unknown values. (2 Days)	11.2.3a/12.2.1a/11.2.1d
MAALG2 1.3	Students will be able to transform linear functions and solve problems involving linear functions (2 Days)	11.2.1e/11.2.3a
MAALG2 1.4	Students wil be able to fit scatter plot data using linear models with technology and use linear models to make predictions. (1 Day)	11.4.2.e

MAALG2 Outcome 2: Quadratic Functions - (21 Days)

Outcome Number	Objective	Standard
MAALG2 2.1	Students will be able to transform quadratic functions and describe the effects of changes to functions in vertex form (2 Days)	11.2.1g
MAALG2 2.2a	Students will be able to define, identify, and graph quadratic functions (2 Days)	11.2.1c
MAALG2 2.2b	Studens will be able to identify and use maximums and minimums of quadratic functions to solve problems	11.2.1g

MAALG2 2.3a	Students will be able to solve quadratic equations by graphing or factoring (1 Day)	11.2.2n/11.2.2.l
MAALG2 2.3b	Students will be able to determine a quadratic function from its roots	11.2.2n/11.2.2.l
MAALG2 2.4a	Students will be able to solve quadratic equations by completing the square (2 Days)	11.2.2n
MAALG2 2.4b	Students will be able to write quadratic equations in vertex form	11.2.1g
MAALG2 2.5a	Students will be able to define and use imaginary and complex numbers (2 Days)	11.1.1a
MAALG2 .5b	Students will solve quadratic equations with complex roots	11.2.2n
MAALG2 2.6a	Students will be able to solve quadratic equations using the Quadratic formula (2 Days)	11.2.2n
MAALG2 2.6b	Students will be able to classify roots using the discriminant	11.2.2.n
MAALG2 2.7a	Students will be able to solve quadratic inequalities by using tables and graphs(2 days)	12.2.1a (AT)
MAALG2 2.7b	Students will be able to solve quadratic inequalities by using algebra	12.2.1a(AT)
MAALG2 2.8	Students will be able to use quadratic functions to model data and the models to analyze and predict (2 days)	11.2.3a
MAALG2 2.9	Students will be able to perform operations with complex numbers (2 days)	11.1.1b/11.1.2a

MAALG2 Outcome 3: Polynomial Functions - (24 days)

Outcome Number	**Objective**	**Standard**
MAALG2 3.1a	Students will be able to identify, evaluate, add, and subtrat polynomials (2 Days)	11.2.2e/11.2.2i
MAALG2 3.1b	Students will be able to classify and graph polynomials	12.2.1a (AT)
MAALG2 3.2	Students will be able to multiply polynomials (2 Days)	11.2.2i
MAALG2 3.3	Students will be able to use long division and synthetic division to divide polynomials(3 days)	11.2.2i
MAALG2 3.4a	Students will be able to use the factor theorem to determine factors of a polynomial (3 days)	11.2.2j
MAALG2 3.4b	Students will be able to factor the sum and difference of two cubes	11.2.2k
MAALG2 3.5a	Students will be able to identify the multiplicity of roots (2 Days)	11.2.2l
MAALG2 3.5b	Students will be able to use the rational root theorem and the irrational root theorem to solve polynomial equations	11.2.2l

MAALG2 3.6a	Students will be able to use the fundamental theorem of Algebra and its corollary to write a polynomial equation of least degree with given roots (3 Days)	12.2.1a (AT)
MAALG2 3.6b	Students will identify all of the roots of a polynomial equation	12.2.1a(AT)
MAALG2 3.7a	Students will use properties of end behavior to analyze, describe, and graph polynomial functions (3 days)	12.2.1a(AT)
MAALG2 3.7b	Studnets will identify and use maxima and minima of polynomial functions to solve problems	11.2.3a
MAALG2 3.8	Students will be able to transform polynomial functions (2 Days)	12.2.1a(AT)
MAALG2 3.9	Students will be able to use technology to find polynomial modeals for a given set of data (1 Day)	12.2.1a(AT)

MAALG2 Outcome 4: Exponential and Logarithmic Functions - (22 days)

Outcome Number	Objective	Standard
MAALG2 4.1	Students will write and evaluate exponential expressions to model growth and decay situations (2 Days)	12.2.1a(AT)
MAALG2 4.2a	Students will graph and recognize inverses of relations and functions (2 DAys)	11.2.1h
MAALG2 4.2b	Students will find inverses of functions	11.2.1h
MAALG2 4.3a	Students will be able to write equivalent forms for exponential and logarithmic functions (2 DAys)	11.2.3a
MAALG2 4.3b	Students will be able to write, evaluate, and graph logarithmic functions	11.2.3a
MAALG2 4.4a	Students will use properties to simplify logarithmic expressions (4 days)	No Standard
MAALG2 4.4b	Students will be able to translate between logarithms in any base	No Standard
MAALG2 4.5a	Students will be able to solve exponential and logarithmic equations and inequalities (3 days)	11.2.3a
MAALG2 4.5b	Students will be able to solve problems involving exponential and logarithmic equations	11.2.3a
MAALG2 4.6	Students will be able to solve equations and real world problems involving e or natural logarithms (3 days)	11.2.3a
MAALG2 4.7	Students will be able to transform exponential and logarithmic functions by changing parameters	No Standard
MAALG2 4.8a	Students will be able to model data by using exponential and logarithmic functions (2 days)	11.2.3a
MAALG2 4.8b	Students will be able to use exponential and logarithmic modeal to analyze and predict real world scenarios	11.2.3a

MAALG2 Outcome 5: Rational and Radical Functions - (22 Days)

Outcome Number	Objective	Standard
MAALG2 5.1	Students will be able to solve problems involving direct, inverse, joint, and combined variation. (2 Days)	11.2.3a
MAALG2 5.2a	Students will be able to simplify rational expressions (2 Days)	11.1.2b
MAALG2 5.2b	Students will be able to multiply and divide rational expressions	11.2.2d
MAALG2 5.3a	Students will be able to add and subtract rational expressions (3 DAys)	11.2.2d
MAALG2 5.3b	Students will be able to simplify complex fractions	11.2.2c
MAALG2 5.4	Students will be able to graph rational functions and transform rational functions by changing parameters (2 Days)	12.2.1a (AT)
MAALG2 5.5	Students will be able to solve rational equations and inequalities (2 DAys)	12.2.1a (AT)
MAALG2 5.6a	Students will be able to rewrite radical expressions by using rational exponents (3 days)	11.2.2c
MAALG2 5.6b	Students will be able to simplify and evaluate radical expressions and expressions containing rational exponents	11.2.2c
MAALG2 5.7	Students will be able to graph radical functions and transform radical functions by changing parameters (2 days)	12.2.1a (AT)
MAALG2 5.8	Students will be able to solve radical equations and inequalities (2 days)	11.2.3a

MAALG2 Outcome 6: Properties and Attributes of Functions - 12 Days

Outcome Number	Objective	Standard
MAALG2 6.3a	Students will write and graph piecewise functions (3 Days)	12.2.1a (AT)
MAALG2 6.3b	Students will use piecewise functions to describe real-world situations	12.3.1a (AT)
MAALG2 6.5a	Students will add, subtract, multiply, and divide functions (3 days)	11.2.2m
MAALG2 6.5b	Students will write and evaluate composite functions	11.2.2m
MAALG2 6.6a	Students will determine whether the inverse of a function is a function (3 Days)	11.2.1h
MAALG2 6.6b	Students will be able to write rules for the inverses of functions	11.2.1h

MAALG2 Outcome 7: Probability - (16 Days)

Outcome Number	Objective	Standard
MAALG2 7.1a	Students will solve problems involving the Fundamental Counting Principle (2 Days)	11.4.3b
MAALG2 7.1b	Students will solve problems involving permutations and combinations	11.4.3b
MAALG2 7.2a	Students will be able to find the theoretical probability of an event (2 Days)	11.4.3b
MAALG2 7.2b	Students will be able to find the experimental probability of an event	11.4.3b
MAALG2 7.3a	Students will be able to determine whether events are independent or dependent (3 days)	11.4.3b
MAALG2 7.3b	Students will be able to find the probability of independent and dependent events	11.4.3b
MAALG2 7.4	Students will be able to construct and interpret two-way frequency tables of data when two categories are associated with each object classified (3 Days)	No Standard
MAALG2 7.5a	Students will be able to find the probablity of mutually exclusive events(2 Days)	11.4.3c
MAALG2 7.5b	Students will be able to find the probability of inclusive events	11.4.3c

MAALG2 Outcome 8: Data Analysis and Statistics - (18 Days)

Outcome Number	Objective	Standard
MAALG2 8.1a	Students will be able to find measure of central tendency and measures of variation for statistical data (2 Days)	11.4.2a
MAALG2 8.1b	Students will be able to examine the effects of outliers on statistical data	11.4.2b/11.4.2f
MAALG2 8.2a	Students will be able to explain how random samples can be used to make inferences about a population (2 days)	11.4.2g
MAALG2 8.2b	Students will be able to use probability to analyze decisions and strategies	11.4.2c/11.4.2d
MAALG2 8.3	Students will be able to focus on the commonailites and differences between surveys, experiments, and observational studies (2 Days)	11.4.2h
MAALG2 8.4	Students will be able to use simulations and hypothesis testing to compare treatments from a randomized experiment (2 Days)	11.4.2c/11.4.2.j

MAALG2 8.5a	Students will be able to estimate population means and proportions and develop margin-of-error from simulations involving random sampling (2 DAys)	12.4.2a (AT)
MAALG2 8.5b	Students will be able to analyze surveys, experiments, and observational studies to judge the validity of the conclusion	11.4.2d
MAALG2 8.7a	Students will be able to use tables to estimate areas under normal curves (3 DAys)	12.4.3 (AT)
MAALG2 8.7b	Students will be able to recognize data sets that are not normal	11.4.2k
MAALG2 8.8	Students will be able to explain that probability can be used to help determine if good decisions are made. Use probabilities to analyze decisions and strategies (2 Days)	12.4.3d (AT)

MAALG2 Outcome 9: Sequences and Series - (12 Days)

Outcome Number	Objective	Standard
MAALG2 9.1a	Students will be able to find the nth term of a sequence (2 Days)	No Standard
MAALG2 9.1b	Students will write rules for sequences	No Standard
MAALG2 9.2	Students will evaluate the sum of a series expressed in sigma notation (2 Days)	No Standard
MAALG2 9.3a	Students will find the indicated terms of an arithmetic sequence (2 Days)	No Standard
MAALG2 9.3b	Students will find the sums of arithmetic series	No Standard
MAALG2 9.4a	Students will find terms of a geometric sequence, including geometric means (3 Days)	No Standard
MAALG2 9.4b	Students will find the sums of geometric series	No Standard

MAGEOM Outcome 1: Foundations for Geometry

Outcome Number	Objective	Standard
MAGEOM 1.1	Students will identify, name, and draw points, lines, segments, rays, and planes.	11.3.1.a
MAGEOM 1.2 MAGEOM 1.2a	Students will use length and midpoint of a segments. Students will construct midpoints and congruents segments.	11.3.1.a 11.3.1.h
MAGEOM 1.3	Students will name and classify angle bisectors.	11.3.1
MAGEOM 1.4a	Students will identify adjacent, vertical, complementary, & suppementary angles.	11.3.1
MAGEOM 1.4b	Students will find measures of pairs of angles.	11.3.1
MAGEOM 1.5	Students will apply formulas for perimeter, area, & circumference.	11.3.3

MAGEOM 1.6a	Students will develop and apply the formula for midpoint.	11.3.2.a
MAGEOM 1.6b	Students will use the Distance Formula and the Pythagorean Theorem to find the distance between two points.	11.3.2.d
MAGEOM 1.7	Students will identify reflections, rotations, and translations & graph them in the coordinate plane.	11.3.2.g 11.3.2.h 11.3.2.i

MAGEOM Outcome 2: Geometric Reasoning

Outcome Number	Objective	Standard
MAGEOM 2.1a	Students will use inductive reasoning to identify patterns and make conjectures.	11.3.1
MAGEOM 2.1b	Students will find counterexamples to disprove conjectures.	11.3.1
MAGEOM 2.2a	Students will identify, write, and analyze the truth value of conditional statements.	11.3.1
MAGEOM 2.2b	Students will write the inverse, converse, and contrapositive of a conditional statement.	11.3.1
MAGEOM 2.3	Students will apply the Law of Detachment and the Law of Syllogism in logical reasoning.	11.3.1.b
MAGEOM 2.4	Students will write and analyze biconditional statements.	11.3.1.b
MAGEOM 2.5	Students will identify properties of equality and congruence and use them to write algebraic proofs.	11.2.2.b
MAGEOM 2.6	Students will write two-column proofs to prove geometric theorems with deductive reasoning.	11.3.1.a 11.3.1.b
MAGEOM 2.7	Students will write flowchart and paragraph proofs to prove geometric theorems with deductive reasoning.	11.3.1.a 11.3.1.b

MAGEOM Outcome 3: Parallel and Perpendicular Lines

Outcome Number	Objective	Standard
MAGEOM 3.1a	Students will identify parallel, perpendicular, and skew lines.	11.3.1.a
MAGEOM 3.1b	Students will identify angles formed by two lines and a transversal.	11.3.1.b
MAGEOM 3.2	Students will prove and use theorems about the angles formed by parallel lines and a transversal.	11.3.1.b
MAGEOM 3.3	Students will use the angles formed by a transversal to prove two lines are parallel.	11.3.1.b
MAGEOM 3.4	Students will prove and apply theorems about perpendicular lines.	11.3.1.b

MAGEOM 3.4b	Students will construct a line perpendicular to a given line through a given point.	11.3.1.h
MAGEOM 3.5	Students will find the slope of a line and identify parallel and perpendicular lines according to their slope.	11.3.2.b
MAGEOM 3.6	Students will graph lines and write their equations in slope-intercept and point-slope form.	11.3.2.c

MAGEOM Outcome 4: Triangle Congruence

Outcome Number	Objective	Standard
MAGEOM 4.1	Students will draw, identify, and describe transformations in the coordinate plane and use properties of rigid motions to determine whether figures are congruents.	11.3.2.g 11.3.2.h 11.3.2.i 11.3.2.j
MAGEOM 4.2	Students will classify triangles by their angle measures and side lengths. Use triangle classification to find angle measure and side lengths.	11.3.2.e
MAGEOM 4.3	Students will find the measures of interior and exterior angles of triangles and apply theorems about the angles.	11.3.1
MAGEOM 4.4	Students will use properties of congruent triangles and prove triangles are congruent by the definition of congruence.	11.3.1.c
MAGEOM 4.5	Students will apply SSS and SAS to construct triangles, solve problems & prove triangles congruent.	11.3.1.b 11.3.1.c
MAGEOM 4.6	Students will apply ASA, AAS, & HL to construct triangles, solve problems, & prove triangles congruent.	11.3.1.b 11.3.1.c
MAGEOM 4.7	Students will use CPCTC to prove parts of triangle are congruent.	11.3.1.b
MAGEOM 4.8	Students will position figures in the coordinate plane for use in coordinate proofs.	11.3.2.e 11.3.2.f
MAGEOM 4.9	Students will prove and apply theorems about iscosoles and equilateral triangles.	11.3.1.c

MAGEOM Outcome 5: Properties and Attributes of Triangles

Outcome Number	Objective	Standard
MAGEOM 5.1	Students will prove and apply theorems about perpendicular bisectors and angle bisectors.	11.3.1
MAGEOM 5.2	Students will prove and apply properties of perpendicular bisectors & angle bisectors of a triangle.	11.3.1.b
MAGEOM 5.3	Students will apply the properties of medians and altitudes of a triangle.	11.3.1.b

MAGEOM 5.4	Students will prove and use properties of triangle midsegments.	11.3.1.b
MAGEOM 5.5	Students will write indirect proofs and apply inequalitites in one triangle.	11.3.1.c
MAGEOM 5.6	Students will apply inequalities in two triangles.	11.3.1.c
MAGEOM 5.7	Students will use the Pythagorean Theorem to solve problems and classify triangles.	11.3.1.d
MAGEOM 5.8	Studetns will justify and apply properties of special right triangles.	11.31.d

MAGEOM Outcome 6: Polygons and Quadrilaterals

Outcome Number	Objective	Standard
MAGEOM 6.1	Students will classify polygons base on their sides and angles. Find and use the measures of interior and exterior angles of polygons.	11.3.1.c
MAGEOM 6.2	Students will prove and apply properties of parallelograms to solve problems.	11.3.1.c
MAGEOM 6.3	Students will prove that a given quadritlateral is a parallelogram.	11.3.1.c
MAGEOM 6.4	Students will prove and apply properties of rectangles, rhombuses, & squares to solve problems.	11.3.2.f
MAGEOM 6.5	Students will prove that a given quadrilateral is a rectangle, rhombus, or square.	11.3.2.f
MAGEOM 6.6	Students will use properties of kites and trapezoids to solve problems.	11.3.2.f

MAGEOM Outcome 7: Similarity

Outcome Number	Objective	Standard
MAGEOM 7.1	Students will identify similar polygons and apply properties of similar polygons to solve problems.	11.3.1.c
MAGEOM 7.2	Students will draw and describe similarity transformations in the coordinate plane.	11.3.2.j
MAGEOM 7.3	Students will prove certain triangles are similar by using AA, SSS, & SAS to solve problems.	11.3.1.e
MAGEOM 7.4a	Students will use properties of similar triangles to find segment lengths.	11.3.1.e
MAGEOM 7.4b	Students will apply proportionality and triangle angle bisector theorems.	11.3.1.e
MAGEOM 7.5	Students will use ratios to make indirect measurements & use scale drawings to solve problems.	11.3.3.c 11.3.1.h

MAGEOM 7.6	Students will apply similarity properties in the coordinate plane to prove figures are similar.	11.3.2

MAGEOM Outcome 8: Right Triangles and Trigonometry (15 days)

Outcome Number	Objective	Standard
MAGEOM 8.1	Students will use geometric mean to find segment lengths in right triangles.	ns
MAGEOM 8.2	Students will find sine, cosine, and tangent of an acute angle. Use trigonometric ratios to find side lengths in right triangles and solve real-world problems.	11.3.1.d
MAGEOM 8.3	Students will use trigonometric ratios to find angle measures in right triangles and to solve real-world problems.	11.3.1.d 12.2.3.b
MAGEOM 8.4	Students will solve problems involving angles of elevation and angles of depression.	11.3.1.d 12.3.2.b
MAGEOM 8.5	Students will use the Law of Sines and the Law of Cosines to solve triangles.	12.3.1.a
MAGEOM 8.6	Students will find the magnitude and direction of a vector and use vectors to solve real-world problems.	12.3.2.c 12.3.2.d

MAGEOM Outcome 9: Extending Transformational Geometry (11 days)

Outcome Number	Objective	Standard
MAGEOM 9.1	Students will identify and draw reflections.	11.3.2.j
MAGEOM 9.2	Students will identify and draw translations.	11.3.2.g
MAGEOM 9.3	Students will identify and draw rotations.	11.3.2.h
MAGEOM 9.4	Students will identify and draw compositions of transformations and apply theorems about isometries.	11.3.2
MAGEOM 9.5	Students will identify and describe symetry in geometric figures.	ns
MAGEOM 9.6	Students will use transformations to draw tessellations and identify figures that will tessellate.	ns
MAGEOM 9.7	Students will identify and draw dilations.	11.3.2.j

MAGEOM Outcome 10: Extending Perimeter, Circumference, and Perimeter (12 days)

Outcome Number	Objective	Standard
MAGEOM 10.1	Students will develop and apply the formulas for the areas of triangles and special quadrilaterals.	11.3.1

MAGEOM 10.2a	Students will develop and apply the formulas for the area and circumference of a circle.	11.3.1
MAGEOM 10.2b	Students will develop and apply the formula for the area of a regular polygon.	11.3.1
MAGEOM 10.3	Students will use the Area Addition Postulate to find the areas of composite figures.	11.3.1
MAGEOM 10.4	Students will find the perimeters and areas of figures in a coordinate plane.	11.3.1
MAGEOM 10.5	Students will describe the effect on perimeter and area when one or more dimensions or a figure are changed.	11.3.3.c
MAGEOM 10.7	Students will calculate geometric probabilities and use them to predict results in real-world situations.	11.4.3.b

MAGEOM Outcome 11: Spatial Reasoning (8 days)

Outcome Number	**Objective**	**Standard**
MAGEOM 11.1	Students will classify three-dimensional figures according to their properties using nets and cross sections.	12.3.2.h
MAGEOM 11.2	Students will learn and apply the formula for the volume of a prism and a cylinder.	11.3.3.e
MAGEOM 11.3	Students will learn and apply the formula for the volume of a pyramid and a cone.	11.3.3.e
MAGEOM 11.4	Students will learn and apply the formula for the volume and surface area of a sphere.	11.3.3.e

MAGEOM Outcome 12: Circles (17 days)

MAGEOM 12.1	Students will identify tangents, secants, and chords.	11.3.1.f
MAGEOM 12.2	Students will apply properties of arc and chords.	11.3.1.g
MAGEOM 12.3	Students will find the area of sectors & arc lengths.	11.3.3.d
MAGEOM 12.4	Students will find the measure of an inscribed angle.	11.3.1.g
MAGEOM 12.5	Students will find the measures of angles formed by line that intersect circles.	11.3.1.g
MAGEOM 12.6	Students will find the lengths of segments formed by lines that intersect circles.	11.3.1.g
MAGEOM 12.7	Students will write equations and graph circles in the coordinate plane.	11.3.2.k

MAPRECALC Outcome 1: Prerequisites

Outcome Number	Objective	Standard
MAPRECALC 1.1	Students will be able to convert between decimals and fractions, write inequalities, apply the basic properties of algebra, and work with exponents and scientific notation.	11.1.1.a 11.1.2.a
MAPRECALC 1.2	Students will be able to graph points, find distances and midpoints on a number line and in a coordinate plane, and write standard form equations of circles.	11.3.2.a 11.3.2.d 11.3.2.k
MAPRECALC 1.3	Students will be able to solve linear equations and inequalities in one variable.	11.2.2.g
MAPRECALC 1.4	Students will be able to use the concepts of slope and *y*-intercept to graph and write linear equations in two variables.	11.2.1.e 11.2.2.h
MAPRECALC 1.5	Students will be able to solve equations involving quadratic, absolute value, and fractional expressions by finding *x*-intercepts or intersections on graphs, by using algebraic techniques, or by using numerical techniques.	11.2.1.f 11.2.1.g
MAPRECALC 1.6	Students will be able to add, subtract, multiply, and divide complex numbers; and find complex zeros of quadratic fuctions.	11.1.2.a 11.2.1.g 11.2.2.n
MAPRECALC 1.7	Students will be able to solve inequalities involving absolute value, quadratic polynomials, and expressions involving fractions.	11.2.2.b 11.2.2.g

MAPRECALC Outcome 2: Functions and Graphs

Outcome Number	Objective	Standard
MAPRECALC 2.1	Students will be able to use numerical, algebraic, and graphical models to solve problems and will be able to translate from one model to another.	11.2.2.f
MAPRECALC 2.2a	Students will be able to represent functions numerically, algebraically, and graphically.	11.2.1.a
MAPRECALC 2.2b	Students will determine the omain and range for functions.	11.2.1.d
MAPRECALC 2.2c	Students will analyze functions characteristics such as extreme values, symmetry, asymptotes, and end behavior	12.2.1.a 12.2.1.e 12.3.2.a
MAPRECALC 2.3	Students will recognize graphs of twelve basic functions, determine domains of functions related to the twelve basic functions, and combine the twelve basic functions in various ways to create new functions.	12.2.1.a 11.2.1.d 12.2.1.d

MAPRECALC 2.4	Students will build new functions from basic functions by adding, subtracting, multiplying, dividing, and composing functions.	11.2.2.m 12.2.1.d
MAPRECALC 2.5	Students will define functions and relations parametrically and will be able to find inverses of functions and relations.	11.2.1.h
MAPRECALC 2.6	Students will algebraically and graphically represent translations, reflections, stretches, and shrinks of functions and parametric relations.	12.2.1.d
MAPRECALC 2.7	Students will identify appropriate basic functions with which to model real-world problems and be able to produce specific functions to model data, formlas, graphs, and verbal descriptions.	11.1.2.c 11.2.3.a

MAPRECALC Outcome 3: Polynomial, Power, & Rational Functions

Outcome Number	Objective	Standard
MAPRECALC 3.1	Students will recognize and graph linear and quadratic functions, and use these functions to model situations and solve problems.	11.2.1.e 11.2.1.g 11.2.3.a
MAPRECALC 3.2	Students will sketch power functions in the form of $f(x) = kx^a$.	12.2.1.a
MAPRECALC 3.3	Students will graph polynomial functions, predict their end behavior, and find their real zeros using a grapher or an algebraic method.	12.2.1.e 11.2.2.l
MAPRECALC 3.4a	Students will divide polynomials using long division or synthetic division.	11.2.2.l
MAPRECALC 3.4b	Students will apply the Remainder Theorem, Factor Theorem, & Rational Zeros Theorem.	11.2.2.l 11.2.2.j
MAPRECALC 3.4c	Students will find upper and lower bounds for zeros of polynomials.	11.2.2.j
MAPRECALC 3.5	Students will factor polynomials with real coefficients using factors with complex coefficients.	11.2.2.n
MAPRECALC 3.6	Students will describe the graphs of rational functions, identify horizontal and vertical asymptotes, and predict the end behavior of rational functions.	12.2.1.e 12.3.2.a
MAPRECALC 3.7	Students will solve equations involving fractions using both algebraic and graphical techniques and to identify extraneous solutions.	12.2.1
MAPRECALC 3.8	Students will solve inequalities involving polynomials and rational functions by using both algebraic and graphical techniques.	12.2.1

MAPRECALC Outcome 4: Exponential, Logistic, & Logarithmic Functions

Outcome Number	Objective	Standard
MAPRECALC 4.1	Students will evaluate exponential expressions and identify and graph exponential and logistic functions.	12.2.1.a
MAPRECALC 4.2	Students will use exponential growth, decay, and regression to model real-life problems.	11.2.3.a
MAPRECALC 4.3	Students will convert equations between logarithmic form and exponential form, evaluate common and natural logarithms, and graph common and natural logarithmic functions.	12.2.1.a
MAPRECALC 4.4	Students will apply the properties of logarithms to evaluate expressions and graph functions, and be able to re-express data.	11.2.3.a 12.2.1.a
MAPRECALC 4.5	Students will apply the properties of logarithms to solve exponential and logarithmic equations algebraically and solve application problems using these equations.	11.2.3.a
MAPRECALC 4.6	Students will use exponential functions and equations to solve business and finance applications related to compound interest and annuities.	11.2.3.a

MAPRECALC Outcome 5: Analytic Geometry in Two and Three Dimensions

Outcome Number	Objective	Standard
MAPRECALC 5.1	Students will find the equation, focus, and directrix of a parabola.	12.3.2.f
MAPRECALC 5.2	Students will find the equation, vertices, and foci of an ellipse.	12.3.2.f
MAPRECALC 5.3	Students will find the equation, vertices, and foci of a hyperbola.	12.3.2.f

MATRIG Outcome 1: Trigonometric Functions

Outcome Number	Objective	Standard
MATRIG 1.1	Students will convert between radians and degrees, find arc lengths, convert to nautical miles, and solve problems involving angular speed.	12.2.1.f 12.2.1.g
MATRIG 1.2	Students will define the six trigonometric functions using the lengths of the sides of a right triangle.	12.2.1.c
MATRIG 1.3	Students will solve problems involving the trigonometric functions of real numbers and the properties of the sine and cosine as periodic functions.	12.2.2.b 12.2.1.b

MATRIG 1.4	Students will generate the graphs of the sine and cosine functions and explore various transformations of these graphs.	12.2.2.d 12.2.3.a
MATRIG 1.5	Students will generate the graphs of tangent, cotangent, secant, and cosecant functions and to explore various transformations of these graphs.	
MATRIG 1.6	Students will graph sums, differences, and other combinations of trigonometric and algebraic functions.	12.2.2.d 12.2.3.a
MATRIG 1.7	Students will relate the concepts of inverse functions to trigonometric functions.	12.2.2.c
MATRIG 1.8	Students will apply the concepts of trigonometry to solve real-world problems.	12.2.3.b

MATRIG Outcome 2: Analytic Trigonometry

Outcome Number	Objective	Standard
MATRIG 2.1	Students will use the fundamental identities to simplify trigonometric expressions and solve trigonometric equations.	12.2.2.a
MATRIG 2.2	Students will decide whether an equation is an identity and to confirm identities analytically.	12.2.2.a
MATRIG 2.3	Students will apply the identities for the cosine, sine, and tangent of a difference or sum.	12.2.2.a
MATRIG 2.4	Students will apply the double-angle, power-reducing, & half-angle identities.	12.2.2.a
MATRIG 2.5	Students will understand the proof of the Law of Sines and use the computational applications of the Law of Sines to solve a variety of problems.	12.3.1.a
MATRIG 2.6	Students will apply the Law of Cosines to solve acute and obtuse triangles and to determine the area of a triangle in terms of the measures of the sides and angles.	12.3.1.a

MATRIG Outcome 3: Applications of Trigonometry

Outcome Number	Objective	Standard
MATRIG 3.1	Students will apply the arithmetic of vectors and use vectors to solve real-world problems.	12.3.2.c 12.3.2.d 12.3.2.e
MATRIG 3.2	Students will calculate dot products and projections of vectors.	12.3.2.e
MATRIG 3.3	Students will define parametric equations, graph curves parametrically, and solve application problems using parametric equations.	12.2

MATRIG 3.4	Students will convert points and equations from polar to rectangular coordinates and vice versa	12.2
MATRIG 3.5	Students will graph polar equations and determine the maximum $\|r\|$ - value and the symmetry of a graph.	12.3.2.
MATRIG 3.6	Students will represent complex numbers in the complex plane and write them in polar form.	12.2.1