

SAT Skills	Standard Alignment
Solving linear equations and linear inequalities (in these expressions, x is a constant or the product of a constant)	MA.912.AR.2.1 MA.912.AR.2.6
Interpreting linear functions	MA.912.F.1.5
Linear inequality and equation word problems	MA.912.AR.2.6
Graphing linear equations	MA.912.AR.2.5
Linear function word problems	MA.912.AR.2.2
Systems of linear inequalities word problems	MA.912.AR.9.4 MA.912.AR.9.5
Solving systems of linear equations	MA.912.AR.9.1 MA.912.AR.9.2
Solving quadratic equations	MA.912.AR.3.1
Interpreting nonlinear expressions	
Quadratic and exponential word problems	MA.912.AR.3.1 MA.912.AR.5.3
Radicals and rational exponents	MA.912.NSO.1.1
Operations with rational expressions and polynomials	MA.912.NSO.1.4 MA.912.AR.1.3
Polynomial factors and graphs	MA.912.AR.6.5
Nonlinear equation graphs	MA.912.AR.3.7 MA.912.AR.4.3 MA.912.AR.7.2 MA.912.AR.9.3
Linear and quadratic systems	MA.912.AR.9.1 MA.912.AR.9.2
Structure in expressions	MA.912.NSO.1.2 MA.912.NSO.1.3 MA.912.AR.1.1
Isolating quantities	MA.912.AR.1.2
Functions	MA.912.F.1.1 MA.912.F.1.2
Ratios, rates, and proportions	MA.912.FL.1.2
Percents	MA.912.FL.1.1
Units	
Table data	MA.912.DP.3.1
Scatterplots	MA.912.DP.2.4 MA.912.DP.2.5 MA.912.DP.2.6
Key features of graphs	MA.912.AR.2.4 MA.912.AR.3.7 MA.912.AR.3.8 MA.912.AR.4.3 MA.912.AR.5.6 MA.912.F.1.6

SAT Skills	Standard Alignment
Linear and exponential growth	MA.912.F.1.7 MA.912.FL.3.4
Data inferences	MA.912.DP.5.8 MA.912.DP.5.11
Center, spread, and shape of distributions	MA.912.DP.2.1
Data collection and conclusions	MA.912.DP.5.2 MA.912.DP.5.3 MA.912.DP.5.5 MA.912.DP.5.6
Volume word problems	MA.912.GR.4.5
Right triangle word problems	MA.912.T.1.2
Congruence and similarity	MA.912.GR.1.6
Right triangle geometry	MA.912.T.1.1
Angles, arc lengths, and trig functions	MA.912.GR.6.1
Circle theorems	MA.912.GR.6.2 MA.912.GR.6.4
Circle equations	MA.912.GR.7.3
Complex numbers	MA.912.NSO.2.1

SAT Topic
Heart of Algebra
Heart of Algebra
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Heart of Algebra
Heart of Algebra
Passport to Advanced Math
Passport to Advanced Math
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Passport to Advanced Math
Passport to Advanced Math
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Passport to Advanced Math
Problem Solving and Data Analysis
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[illegible]

AR.1 Standards	AR.2 Standards	AR.3 Standards	AR.4 Standards	AR.5 Standards	AR.6 Standards	AR.7 Standards	AR.8 Standards	AR.9 Standards	AR.10 Standards
	MA.912.AR.2.1	MA.912.AR.3.1	MA.912.AR.4.2	MA.912.AR.5.7	MA.912.AR.6.1	MA.912.AR.7.2		MA.912.AR.9.2	MA.912.AR.10.1
	MA.912.AR.2.4	MA.912.AR.3.2	MA.912.AR.4.4	MA.912.AR.5.9	MA.912.AR.6.5	MA.912.AR.7.3		MA.912.AR.9.3	MA.912.AR.10.2
	MA.912.AR.2.6	MA.912.AR.3.3			MA.912.AR.6.6	MA.912.AR.7.4		MA.912.AR.9.5	
	MA.912.AR.2.8	MA.912.AR.3.7						MA.912.AR.9.10	
		MA.912.AR.3.8							
		MA.912.AR.3.9							
		MA.912.AR.3.10							

27 AR Standards

NSO.1 Standards	NSO.2 Standards	NSO.3 Standards	NSO.4 Standards
	MA.912.NSO.2.1		MA.912.NSO.4.1
			MA.912.NSO.4.3

3 NSO Standards

F.1 Standards	F.2 Standards	F.3 Standards
MA.912.F.1.3	MA.912.F.2.2	
MA.912.F.1.7	MA.912.F.2.3	

4 F Standards

DP.1 Standards	DP.2 Standards	DP.3 Standards	DP.4 Standards	DP.5 Standards
	MA.912.DP.2.1			MA.912.DP.5.2
	MA.912.DP.2.5			MA.912.DP.5.3
				MA.912.DP.5.5
				MA.912.DP.5.6
				MA.912.DP.5.8
				MA.912.DP.5.11

8 DP Standards

FL.1 Standards	FL.2 Standards	FL.3 Standards
MA.912.FL.1.1		
MA.912.FL.1.2		

T.1 Standards	T.3 Standards
MA.912.T.1.7	MA.912.T.3.1
	MA.912.T.3.2
	MA.912.T.3.3

2 FL Standards

4 T Standards

GR.1 Standards	GR.2 Standards	GR.3 Standards	GR.4 Standards	GR.5 Standards	GR.6 Standards	GR.7 Standards
MA.912.GR.1.1		MA.912.GR.3.2				MA.912.GR.7.1
						MA.912.GR.7.4

4 GR Standards

52 Total Standards

ELA Expectations, ELDs and MTRS

ACT Skills	Standard Alignment
Basic operations using whole numbers, decimals, fractions, and integers	
Place value	
Square roots and approximations	
The concept of exponents	
Scientific notation	
Factors	
Ratio, proportion, and percent	MA.912.FL.1.2
Linear equations in one variable	MA.912.AR.2.1
Absolute value and ordering numbers by value	
Elementary counting techniques and simple probability	
Data collection, representation, and interpretation	
Understanding simple descriptive statistics	
Properties of exponents and square roots	MA.912.NSO.1.1 MA.912.NSO.1.2
Evaluation of algebraic expressions through substitution	
Using variables to express functional relationships	
Understanding algebraic operations	MA.912.AR.1.3
The solution of quadratic equations by factoring	MA.912.AR.3.1 MA.912.AR.3.2
The quadratic formula	MA.912.AR.3.1 MA.912.AR.3.2
Rational and radical expressions	MA.912.NSO.1.3
Absolute value equations and inequalities	MA.912.AR.4.1 MA.912.AR.4.2
Sequences and patterns	MA.912.AR.10.1 MA.912.AR.10.2
Systems of equations	MA.912.AR.9.1 MA.912.AR.9.2
Quadratic inequalities	MA.912.AR.3.3 MA.912.AR.3.9 MA.912.AR.3.10
Functions and modeling	MA.912.AR.2.5 MA.912.AR.3.8 MA.912.AR.4.4 MA.912.AR.5.7 MA.912.AR.5.9 MA.912.AR.6.6 MA.912.AR.7.3 MA.912.AR.7.4 MA.912.AR.9.10 MA.912.F.1.8

Matrices	MA.912.NSO.4.1 MA.912.NSO.4.3
Roots of polynomials	MA.912.AR.6.1
Complex numbers	MA.912.NSO.2.1
Graphing and the relations between equations and graphs, including points, lines, polynomials, circles, and other curves	MA.912.AR.2.4
Graphing inequalities	MA.912.AR.2.6 MA.912.AR.2.8
Slope	MA.912.F.1.3
Parallel and perpendicular lines	MA.912.AR.2.3
Distance	MA.912.GR.3.2
Midpoints	MA.912.GR.3.2
Conics	MA.912.GR.7.1 MA.912.GR.7.2 MA.912.GR.7.4
Properties and relations of plane figures, including angles and relations among perpendicular and parallel lines	MA.912.GR.1.1
Properties of circles, triangles, rectangles, parallelograms, and trapezoids	MA.912.GR.1.3 MA.912.GR.1.4 MA.912.GR.1.5 MA.912.GR.3.2
Transformations	MA.912.F.2.1 MA.912.F.2.2 MA.912.F.2.3 MA.912.GR.2.1
The concept of proof and proof techniques	MA.912.GR.1.1 MA.912.GR.1.2
Volume	MA.912.GR.4.5
Applications of geometry to three dimensions	MA.912.GR.4.1 MA.912.GR.4.2
Trigonometric relations in right triangles	MA.912.T.1.1 MA.912.T.1.2
Values and properties of trigonometric functions	MA.912.T.3.2
Graphing trigonometric functions	MA.912.T.3.2
Modeling using trigonometric functions	MA.912.T.3.1
Use of trigonometric identities	MA.912.T.1.7
Solving trigonometric equations	MA.912.T.3.3

ACT Topic

Pre-Algebra (20-25%)

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Pre-Algebra

Elementary Algebra (15-20%)

Elementary Algebra

Elementary Algebra

Elementary Algebra

Elementary Algebra

Intermediate Algebra (15-20%)

Intermediate Algebra

Intermediate Algebra

Intermediate Algebra

Intermediate Algebra

Intermediate Algebra

Intermediate Algebra

Intermediate Algebra

Intermediate Algebra

Intermediate Algebra

Coordinate Geometry (15-20%)

Coordinate Geometry

Coordinate Geometry

Coordinate Geometry

Coordinate Geometry

Coordinate Geometry

Coordinate Geometry

Plane Geometry (20-25%)

Plane Geometry

Plane Geometry

Plane Geometry

Plane Geometry

Plane Geometry

Trigonometry (5-10%)

Trigonometry

Trigonometry

Trigonometry

Trigonometry

Trigonometry

Proposed Course	
SAT Skills Addressed	ACT Skills Addressed
18/36	27/46

Algebra 1	
SAT Skills Addressed	ACT Skills Addressed
20	13

Geometry	
SAT Skills Addressed	ACT Skills Addressed
7	10

Algebra 2	
SAT Skills Addressed	ACT Skills Addressed
10	13

Comparison to
Algebra1:
Geometry:
Algebra 2:
MFCA:
MFCLA:
MFCS:
Proposed Course:

94 total

o proposed course and benchmarks addressing SAT/ACT Skills
33 benchmarks address SAT ACT skills
18 benchmarks address SAT ACT skills
23 benchmarks address SAT ACT skills
23 benchmarks address SAT ACT skills
11 benchmarks address SAT ACT skills
17 benchmarks address SAT ACT skills
All 52 benchmarks address SAT ACT skills

al B.E.S.T. MA.912 Benchmarks address SAT/ACT Skills
