

Algebra II – Unit 1 – ELL Scaffold

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 1 CCSS: N.CN.1, N.CN.2 WIDA ELDS: 3 Reading Speaking Writing	Use properties of operations to add, subtract, and multiply complex numbers.		Describe and explain orally and in writing how to use properties of operations to add, subtract, and multiply complex numbers <i>using</i> Manipulatives , <i>drawings and a word wall</i> .		VU: Sum, difference, product
					LFC: Present tense
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Describe and explain orally and in writing how to use properties of operations to add, subtract, and multiply complex numbers in L1 and/or use gestures, equations and selected technical words.	Describe and explain orally and in writing how to use properties of operations to add, subtract, and multiply complex numbers in L1 and/or use selected technical vocabulary in phrases and short sentences with equations to explain the solution.	Describe and explain orally and in writing how to use properties of operations to add, subtract, and multiply complex numbers using equations and key technical vocabulary in a series of simple sentences.	Describe and explain orally and in writing how to use properties of operations to add, subtract, and multiply complex numbers using key technical vocabulary in expanded and some complex sentences.	Describe and explain orally and in writing how to use properties of operations to add, subtract, and multiply complex numbers using technical vocabulary in multiple, complex sentences.
Learning Supports	Manipulatives Small group Word/picture wall Math Journal L1 text and/or support Sentence frames	Manipulatives Small group Word/picture wall Math Journal L1 text and/or support Sentence frames	Manipulatives Small group Word wall Math Journal	Manipulatives Small group Math Journal	Manipulatives

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 2 CCSS: N.CN.7 A.REI.4.b WIDA ELDS: 3 Reading Speaking Writing	Solve quadratic equations with real coefficients that have complex solutions.		Describe and explain how to solve quadratic equations with real coefficients that have complex solutions <i>using</i> Manipulatives , <i>word wall</i> , Charts/Posters and Math Journal .		VU: Function, equation, quadratic, real coefficients, solution
					LFC: Wh- questions, “is defined by”
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Describe and explain how to solve quadratic equations with real coefficients that have complex solutions using in L1 and/or use gestures, equations and selected technical words.	Describe and explain how to solve quadratic equations with real coefficients that have complex solutions using in L1 and/or use selected technical vocabulary in phrases and short sentences with equations to explain the solution.	Describe and explain how to solve quadratic equations with real coefficients that have complex solutions using key technical vocabulary in a series of simple sentences.	Describe and explain how to solve quadratic equations with real coefficients that have complex solutions using key technical vocabulary in expanded and some complex sentences.	Describe and explain how to solve quadratic equations with real coefficients that have complex solutions using technical vocabulary in multiple, complex sentences.
Learning Supports	Manipulatives Small group Word/picture wall Charts/Posters L1 text and/or support Pictures/illustrations	Manipulatives Small group Word/picture wall Charts/Posters L1 text and/or support Sentence frames	Manipulatives Small group Word wall Charts/Posters	Manipulatives Small group	Manipulatives

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 3 CCSS: N.CN.9 WIDA ELDS: 3 Reading Speaking Writing	Show that the fundamental Theorem of Algebra is true for quadratic polynomials		<u>Demonstrate orally and in writing</u> that the fundamental Theorem of Algebra is true for quadratic polynomials <i>using word wall, Modeling, small group and Peer Coaching.</i>		VU: Quadratic polynomials, investment, interest, discount, expression, acid, ounces
					LFC: Prepositional phrases; embedded clause
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Demonstrate orally and in writing that the fundamental Theorem of Algebra is true for quadratic polynomials in L1 and/or use gestures, drawings and selected, technical words.	Demonstrate orally and in writing that the fundamental Theorem of Algebra is true for quadratic polynomials that have complex solutions using in L1 and/or use selected technical vocabulary in phrases and short sentences.	Demonstrate orally and in writing that the fundamental Theorem of Algebra is true for quadratic polynomials using key technical vocabulary in a series of simple sentences.	Demonstrate orally and in writing that the fundamental Theorem of Algebra is true for quadratic polynomials using key technical vocabulary in expanded and some complex sentences.	Demonstrate orally and in writing that the fundamental Theorem of Algebra is true for quadratic polynomials using technical vocabulary in multiple, complex sentences.
Learning Supports	Teacher Modeling White Board Small group Word/picture wall L1 text and/or support Pictures/illustrations Peer Coach	Teacher Modeling White Board Small group Word/picture wall L1 text and/or support Sentence frames Peer Coach	White Board Small group Word wall Peer Coach	White Board Small group	White Board

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 4 CCSS: A.SSE.1 WIDA ELDS: 3 Reading Speaking Writing	Interpret coefficients, terms, degree, powers (positive and negative), leading coefficients and monomials in polynomial and rational expressions in terms of context. ★		<u>Read and write to understand</u> coefficients, terms, degree, powers (positive and negative), leading coefficients and monomials in polynomial and rational expressions in terms of context <i>using word wall, White Board and small group.</i>		VU: Coefficients, terms, width, standard form, polynomial, rational expressions, height, volume
					LFC: Present tense, comparative terms
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Read and write to understand coefficients terms, degree, powers (positive and negative), leading coefficients and monomials in polynomial and rational expressions in terms of context in L1 and/or use gestures, examples and selected, technical words.	Read and write to understand coefficients terms, degree, powers (positive and negative), leading coefficients and monomials in polynomial and rational expressions in terms of context in L1 and/or use selected technical vocabulary in phrases and short sentences.	Read and write to understand coefficients terms, degree, powers (positive and negative), leading coefficients and monomials in polynomial and rational expressions in terms of context using key technical vocabulary in a series of simple sentences.	Read and write to understand coefficients terms, degree, powers (positive and negative), leading coefficients and monomials in polynomial and rational expressions in terms of context using key technical vocabulary in expanded and some complex sentences.	Read and write to understand coefficients terms, degree, powers (positive and negative), leading coefficients and monomials in polynomial and rational expressions in terms of context using technical vocabulary in multiple, complex sentences.
Learning Supports	Teacher Modeling White Board Math Journal Small group Word/picture wall L1 text and/or support Pictures/illustrations	Teacher Modeling White Board Math Journal Small group Word/picture wall L1 text and/or support Sentence frames	White Board Math Journal Small group Word wall	White Board Math Journal Small group	White Board Math Journal

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 5 CCSS: A.APR.1, A.APR.2 WIDA ELDS: 3 Reading Speaking Writing	Restructure by performing arithmetic operations on polynomial/rational expressions.		<u>Read and write</u> to restructure by performing arithmetic operations on polynomial/rational expressions <i>using models, word wall, White Board and small group.</i>		VU: classify, performing, polynomial, rational expressions, integers, factor, cubes
					LFC: Present tense, imperative tense
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Read and write to restructure by performing arithmetic operations on polynomial/rational expressions in L1 and/or use gestures, examples and selected technical words.	Read and write to restructure by performing arithmetic operations on polynomial/rational expressions in L1 and/or use selected technical vocabulary in phrases and short sentences.	Read and write to restructure by performing arithmetic operations on polynomial/rational expressions using key technical vocabulary in a series of simple sentences.	Read and write to restructure by performing arithmetic operations on polynomial/rational expressions using key, technical vocabulary in expanded and some complex sentences.	Read and write to restructure by performing arithmetic operations on polynomial/rational expressions using technical vocabulary in multiple, complex sentences.
Learning Supports	Teacher Modeling White Board Math Journal Small group Word/picture wall L1 text and/or support Pictures/illustrations	Teacher Modeling White Board Math Journal Small group Word/picture wall L1 text and/or support Sentence frames	Teacher Modeling White Board Math Journal Small group Word wall	White Board Math Journal Small group	White Board Math Journal

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 6 CCSS: A.SSE.4 WIDA ELDS: 3 Reading Speaking Writing	Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. For example, calculate mortgage payments. ★		<u>Read and write</u> the formula for the sum of a finite geometric series and use the formula to solve the problems <i>using a model, word wall, White Board and small group.</i>		VU: Finite, series, function, positive, coordinate, plan, intercepts, end behavior, sketch
					LFC: Present tense, directionality,
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Read and write the formula for the sum of a finite geometric series and use the formula to solve the problems in L1 and/or use gestures, examples and selected, technical words.	Read and write the formula for the sum of a finite geometric series and use the formula to solve the problems in L1 and/or use selected technical vocabulary in phrases and short sentences.	Read and write the formula for the sum of a finite geometric series and use the formula to solve the problems using key, technical vocabulary in a series of simple sentences.	Read and write the formula for the sum of a finite geometric series and use the formula to solve the problems using key, technical vocabulary in expanded and some complex sentences.	Read and write the formula for the sum of a finite geometric series and use the formula to solve the problems using technical vocabulary in complex sentences.
Learning Supports	Teacher Modeling White Board Math Journal Small group Word/picture wall L1 text and/or support Pictures/illustrations	Teacher Modeling White Board Math Journal Small group Word/picture wall L1 text and/or support Sentence frames	Teacher Modeling White Board Math Journal Small group Word wall	White Board Math Journal Small group	White Board Math Journal

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 7 CCSS: A.SSE.2, A.APR.3 A.APR.4 WIDA ELDS: 3 Speaking Writing	Use an appropriate factoring technique to factor expressions completely, including expressions with complex numbers.		<u>Demonstrate orally and in writing</u> an appropriate factoring technique to factor expressions completely including expressions with complex numbers <i>using word wall, Partially Completed Solutions, White Board and small group.</i>		VU: Factoring, expressions, complex
					LFC: Present tense
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Demonstrate orally and in writing an appropriate factoring technique to factor expressions completely including expressions with complex number in L1 and/or use gestures, examples and selected technical words.	Demonstrate orally and in writing an appropriate factoring technique to factor expressions completely including expressions with complex number in L1 and/or use selected technical vocabulary in phrases and short sentences.	Demonstrate orally and in writing an appropriate factoring technique to factor expressions completely including expressions with complex numbers using key, technical vocabulary in a series of simple sentences.	Demonstrate orally and in writing an appropriate factoring technique to factor expressions completely including expressions with complex numbers using key, technical vocabulary in expanded sentences.	Demonstrate orally and in writing an appropriate factoring technique to factor expressions completely including expressions with complex numbers using technical vocabulary in complex sentences.
Learning Supports	White Board Math Journal Small group Word/picture wall L1 text and/or support Partially Completed Solutions	White Board Math Journal Small group Word/picture wall L1 text and/or support Sentence frames Partially Completed Solutions	White Board Math Journal Small group Word wall Partially Completed Solutions	White Board Math Journal Small group	White Board Math Journal

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 8 CCSS: A.SSE.2, A.APR.3 WIDA ELDS: 3 Speaking Writing	Explain the relationship between zeros and factors of polynomials and use zeros to construct a rough graph of the function defined by the polynomial.		Describe and explain the relationship between zeros and factors of polynomials and use zeros to construct a rough graph of the function defined by the polynomial <i>using word wall, White Board and small group.</i>		VU: Zeros, factors, polynomials, rough, function
					LFC: Present tense, prepositional terms
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Describe and explain the relationship between zeros and factors of polynomials and use zeros to construct a rough graph of the function defined by the polynomial in L1 and/or use gestures, examples and selected technical words.	Describe and explain the relationship between zeros and factors of polynomials and use zeros to construct a rough graph of the function defined by the polynomial in L1 and/or use selected technical vocabulary in phrases and short sentences.	Describe and explain the relationship between zeros and factors of polynomials and use zeros to construct a rough graph of the function defined by the polynomial using key technical vocabulary in a series of simple sentences.	Describe and explain the relationship between zeros and factors of polynomials and use zeros to construct a rough graph of the function defined by the polynomial using key technical vocabulary in expanded sentences.	Describe and explain the relationship between zeros and factors of polynomials and use zeros to construct a rough graph of the function defined by the polynomial using technical vocabulary in complex sentences.
Learning Supports	White Board Math Journal Small group Word/picture wall L1 text and/or support Pictures/illustrations	White Board Math Journal Small group Word/picture wall L1 text and/or support Sentence frames	White Board Math Journal Small group Word wall	White Board Math Journal Small group	White Board Math Journal