

MAT 126/126S 2022-23

Date	Topics	Activities	I can	Resources	Connections- Reading/Writing/AH/PLC S
Aug 11th-23 rd	Review of number systems, estimation and percentages	Formative assessment activities	I can write sets using set notation	Lial Hornsby Algebra for College Students textbook	AH Bar graphs and circle graphs
	Basic operations with whole numbers and decimals 8-15	Test MC and OR	I can use number lines	map.mathshell.org	Reading Math application problems
	Operations on Real numbers 8-16	Act/Kyote test weekly	I can use common sets of numbers	Math xl	Writing- Writing to learn, detail description of trip planning
	Exponents	Notes	I can find additive inverses	Khan Academy	
	Roots 8-17	Pair and Shair mix and match activities	I can use absolute value	Larson Hostetler Algebra and Trig	
		Asvab review	I can use inequality symbols	Punchline Algebra	
	Order of operations 8/19		I can graph sets of real numbers	misc online resources	
	properties of real numbers 8/22		I can perform operations on real numbers	Kuta software	
	Perents, percent problems and percent of increase and decrease		I can use exponents		
	Review and Test 1 8/23-8/24		I can find square roots		
		I can use the order of operations			
		I can evaluate algebraic expressions for given values of variables			
		I can use the distributive property			
		I can use the inverse properties			
		I can use the identity properties			
		I can use the commutative and associative properties			
		I can use the multiplication property of zero			

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Date	Topics	Activities	I can	Resources	Connections- Reading/Writing/AH/PLC S
	Linear equations in on variable 8/24	Formative assessment activities	I can decide whether a number is a solution of a linear equation	Lial Hornsby Algebra for College Students textbook	PLCS- inverstment, percentage, interest rates and carious real life problems
	Formulas 8/25-8/26 quiz	Test MC and OR	I can solve linear equations by using the addition and multiplication properties of equality	map.mathshell.org	midpoint and distance trip planning
	Application of linear equations 8/29-8/30	Act/Kyote test weekly	I can solve linear equations by using the distributive property	Kuta software	

Aug 25th-Sept. 13	Linear inequalities in one variable 8/31	Notes	I can solve linear equations with fractions or decimals	Khan Academy
		Pair and Shair	I can identify conditional equations, contradictions and identities	Larson Hostetler Algebra and Trig
	Solving absolute value inequalities 9/1	mix and match activities	I can solve formula for a specified variable	Punchline Algebra
	Mid chapter test/quiz 9/2	quiz	I can solve applied problems by using formulas	misc online resources
	Solving compound inequalities 9/6		I can solve percent problems	
	Combining equations and inequalities 9/7		I can solve investment problems	
	Application problems equations and inequalities 9/8-9/9		I can solve mixture problems	
	Review 9/12		I can solve problems about differnet denominations of money	
	Test 9/13		I can solve problems about uniform motion	
	Ratio and proportions direct, inverse and joint variation Combined Variation		I can solve problems about angles I can solve linear inequalities by usig the addition property I can solve linear inequalities by using the multiplicative property I can solve linear inequalities with three parts I can solve applied problems by using linear inequalities I can find the intersection of two sets I can solve compound inequalities with the word and I can find the union of two sets I can solve compound inequalities with the word or I can interpret a line graph	

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Date	Topics	Activities	I can	Resources	Connections- Reading/Writing/AH/PLCS
	Cert Test 9/14	Formative assessment activities	I can plot ordered pairs	Lial Hornsby Algebra for College Students textbook	Reading- Content reading
		Test MC and OR	I can find ordered pairs that satisfy a given equation	map.mathshell.org	Art- Graphs and applying slope
	rectangular coordinate system 9/15	Act/Kyote test weekly	I can graph line	Kuta software	PLCS- Scatterplots, prdiction equations oil changes versus cost of repairs, medicine dosage
	Slope of a line 9/16	Notes	I can find the x and y intercepts	Khan Academy	
		Pair and Shair	I can recognize equations of horizontal and vertical lines and lines passing through the origin	Larson Hostetler Algebra and Trig	
	parallel and perpendicular line 9/19	mix and match activities	I can use the midpoint formula	Punchline Algebra	

Sep 14th- Oct. 7	Writing equations of lines in two variable 9/20-9/22	quiz	I can use a graphing calculator to graph an equation	misc online resources
	Quiz 9/23		I can find the slope of a line given two points on the line	
	Intoduction to functions 9/26		I can find the slope of a line given an equation of the line	
	Midpoint and distance formula 9/27		I can graph a line given its slope and a point on the line	
	Activity Midpoint, distance and slope 9/28		I can use slopes to determine whether two lines are parallell, perpendicular or neither	
	Review 9/29		I can solve problems involving average rate of change	
	Test 9/30		I can write an equation of a line, given its slope and y intercept	
			I can graph a line using its slope and y intercept	
			I can write an equation of a line given its slope and a point on the line	
			I can write an equation of a line given two points on the line	
	I can write an equation of a line parallel or perpendicular to a given line			
	I can write an equation of a line that models real data			
	I can use a graphing calculator to solve linear equations in one variable			
	I can distinguish between independent and dependent variable			
	I can define and identify relations and functions			
	I can find the domain and range			
	I can identify functions defined by graphs and equations			
	I can use function notation			
	I can graph linear and constant functions			

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ct 27th	Systems of linear equation 10/17-10/18	Formative assessment activities	I can decide whether an ordered pair is a solution of a linear system	Lial Hornsby Algebra for College Students textbook	Reading- System of equation application problems.
	Applications with systems of equations 10/19 10/20	Test MC and OR	I can solve linear systems by substitution	map.mathshell.org	Writing to learn creating systems of equation application problems.
		Act/Kyote test weekly	I can solve linear systems by elimination	Kuta software	
		Notes	I can solve special systems	Khan Academy	
		Pair and Shair	I can recognize how a graphing calculator is used to solve a linear system	Larson Hostetler Algebra and Trig	

Oct. 17-Oct	three variable 10/21	mix and match activities	I can solve geometry problems by using two variable	Punchline Algebra	
	review of systems of two and three variables and applications 10/24-10/26	quiz	I can solve money problems by using two variables	misc online resources	
	Test 10/27		I can solve mixture problems by using two variables	math xl	
	Matices and determinants Cramers rule by hand and on the calculator		I can solve distance rate time problems by using two variables I can solve problems with three variables by using a system of three equations		

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Date	Topics	Activities	I can	Resources	Connections-Reading/Writing/AH/PLCS
Oct 28th- Dec 16th	Exponents 10/28-11/1	Formative assessment activities	I can use the product rule for exponents	Lial Hornsby Algebra for College Students textbook	
	Adding and subtracting polynomials 11/2	Test MC and OR	I can define 0 and negative exponents	map.mathshell.org	
	polynomial functions 11/3	Act/Kyote test weekly	I can use the quotient rule for exponents	Kuta software	
	Multiplying Polynomials 11/4-11/9	Notes	I can use the power rule for exponents	Khan Academy	
	Dividing polynomials 11/10-11/11	Pair and Shair	I can simplify exponential expressions	Larson Hostetler Algebra and Trig	
	Review 11/14	mix and match activities	I can use the rules for exponents with scientific notation	Punchline Algebra	
	Test 11/15	quiz	I can know the basic definitions for polynomials	misc online resources	
	Radicals,Complex and imaginary numbers		I can find the degree of a polynomial	Kahoot	
			I can add and subtract polynomials	Math xl	
			I can recognize and evaluate polynomial functions		
		I can use a polynomial function to model data			
		I can add and subtract polynomials functions			
		I can find the composition of functions			
		I can graph basic polynomial functions			
		I can multiply any two polynomials			
		I can multiply binomials			
		I can find the product of the sum and difference of two terms			
		I can find the square of a binomial			
		I can divide a polynomial by a monomial			
		I can divide a polynomial of two or more terms			

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Date	Topics	Activities	I can	Resources	Connections- Reading/Writing/AH/PLC S	
Jan 2th- Jan 24	Factoring GCF and factor by grouping 1/2	Formative assessment activities	I can factor out the greatest common factor	Lial Hornsby Algebra for College Students textbook		
	Factoring trinomials 1/3-1/5	Test MC and OR	I can factor by grouping	map.mathshell.org		
	Quiz 1/6	Act/Compass test weekly	I can factor trinomials when the coefficient of the squared term is 1	misc online resources		
	Factoring special trinomials 1/9	Pair and Shair	I can factor trinomials when the coefficient of the squared term is not 1	Khan Academy		
	Solving quadratic equations by factoring, completing the square and quadratic formula 1/10-1/12	mix and match activities	I can use the zero factor property	Larson Hostetler Algebra and Trig		Quadratics applications
	Quadratic application problems 1/13-1/20	quiz	I can solve application problems that require the zero factor property	Punchline Algebra		Quadratic applications
	review and test 1/23-1/24					
Date	Topics	Activities	I can	Resources	Connections- Reading/Writing/AH/PLC S	
Jan 25th- Feb 10th	Rational expressions	Formative assessment activities	I can define rational expressions	Lial Hornsby Algebra for College Students textbook		
		Test MC and OR	I can define rational expressions and describe their domains	map.mathshell.org		
	simplifying rational expressions 1/25	Act/Compass test weekly	I can write rational expressions in lowest terms	Kuta software		
	Multiplication and division 1/26	Pair and Shair	I can multiply rational expressions	Khan Academy		
	Adding and subtracting rational expressions 1/27-1/30	mix and match activities	I can find recipricals of rational expressions	Larson Hostetler Algebra and Trig		
	Review 1/31	quiz	I can divide rational expressions	Punchline Algebra		
	Test 2/1		I can add and subtract rational expressions with the same denominator	misc online resources		
Rational equations		I can find a least common denominator	math xl			
			I can add and subtract rational expressions with different denominators			
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Date	Topics	Activities	I can	Resources	Connections- Reading/Writing/AH/PLC S	
	ACT Prep 2/15-2/17	Formative assessment activities	I can find roots of numbers	Lial Hornsby Algebra for College Students textbook		
		Test MC and OR	I can find principal roots	map.mathshell.org		
		Act/Compass test weekly	I can graph functions defined by radical expressions	Kuta software		
		Pair and Shair	I can find the nth root of the nth powers	Khan Academy		

Mar 13th - Mar 11th	Radical expressions and graphs 2/21-2/24 Rational Exponents 2/27-3/2 Simplifying Radical expressions 3/3-3/8 Review 3/10 Test 3/11	mix and match activities quiz	I can use a calculator to find roots I can use exponential notation for nth roots I can define and use expressions of the form $a^{m/n}$ I can convert between radicals and rational exponents I can use the rules for exponents with rational exponents I can use the product rule for radicals I can use the quotient rules for radicals I can simplify radicals I can simplify product and quotients of radicals with different indexes I can use the pythagorean theorem I can use the distance formula	Larson Hostetler Algebra and Trig Punchline Algebra misc online resources math xl	
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Mar 13th-Apr. 21th	Geometry and circles	Formative assessment activities	I can solve quadratic equations using the square root property	Lial Hornsby Algebra for College Students textbook	PLCS- Pythagorean theorem, 3-4-5 rule
	Pi day activity 3/14	Test MC and OR	I can solve the quadratic equations by completing the square	map.mathshell.org	Reading- application problems
		Act/Compass test weekly	I can solve the quadratic equation with solutions that are not real numbers	Kuta software	Writing- Wizard of Oz scarecrow writing
	Square root properties 3/15-3/17	Pair and Shair	I can solve quadratic equations by using the quadratic formula	Khan Academy	
	Completing the square	mix and match activities	I can use the discriminant to setermine the number and type of solutions	Larson Hostetler Algebra and Trig	
	Pythagorean thm 3/20-3/29	quiz	I can solve formulas for cariables involving squares and square roots	Punchline Algebra	Read whats your angle
	Quadratic formula 3/30-3/31 quiz Formulas and further application 4/10-4/19 Review 4/20 test 4/21		I can solve and apply problems using the Pythagorean Theorem I can solve applied problems using area formulas I can solve applied problems using functions as models	misc online resources Kahoot	

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th	triangles	Formative assessment activities	I can find a difference quotient	Lial Hornsby Algebra for College Students textbook	PLCS- Maximum and minimum
	Right triangle trig	Test MC and OR	I can form composite functions and find their domainsI can graph quadratic funcions	map.mathshell.org	Art - Critter Activity
	Law of sines	Act/Kyote test weekly	I can graph parabolas with vertical and horizontal shifts	Kuta software	

Apr. 20th- May 17t	Law of Cosines	Pair and Shair	I can use the coefficient of x squared to predict the shape and direction in which a parabola opens	Khan Academy
	Exponential Equations	mix and match activities quiz		Larson Hostetler Algebra and Trig
	Logarithmic equations			Punchline Algebra misc online resources
	Lines and angles		I can identify and work with special right triangles sign, cosine, tangent	math xl
	Polygons			
Circles and radians		I can use and apply law of sines and law of cosines		
Review	Final Exams			