AWLOs

MATH 1 (02061/02062)
2019

GRADES 7-12

Number	Priority Level	STANDARDS/AW Learning Objectives	Instructional Depth
refers us to the state or national standard.	*helps us prioritize time and interventions.*	*Standards give us broad expectations. AWLOs describe local teaching expectations and are what we teach to address the standards.*	*describes the level at which the AWLOs are written, providing guidance for planning transformations. Boldfaced depth is instructional goal. Language and Social objectives are used to support goal.*
ALGEBRA: CREATING EQUATIONS			
A.CED.1	**Mastery**	**Apply and extend previous understanding to create equations and inequalities in one variable and use them to solve problems.**	
		Identify whether to use an equation or inequality.	Surface
		Identify the components of writing an equation or inequality; e.g. What is the constant or rate of change?	Surface
		Create the equation or inequality relating the information to a context; e.g., cell phone bill and spending money.	**Deep**
ALGEBRA: REASONING WITH EQUATIONS AND INEQUALITIES			
A.REI.2	**Mastery**	**Apply and extend previous understanding to solve equations, inequalities, and compound inequalities in one variable, including literal equations and inequalities.**	
		Solve two step equations and inequalities.	Surface
		Solve compound inequalities.	Deep
		Solve literal equations.	Deep
		Write a compound inequality from a real-world situation; e.g., How far can you drive if you only have so much money?	**Transfer**
A.REI.3		**Solve equations in one variable and give examples showing how extraneous solutions may arise.**	
A.REI.3a	**Essential**	**Solve rational, absolute value, ~~and square root equation.~~**	
		Solve rational and absolute value equations.	Surface
		Show how extraneous solutions may arise.	**Deep**
A.REI.6		**Analyze and solve pairs of simultaneous linear equations.**	
A.REI.6a	**Enhanced**	**Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.**	
		Understand a solution to a system of linear equations is the point where the lines intersect.	Surface
A.REI.6b	**Essential**	**Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, 3x+2+5 and 3x+ 2y=6 have no solution because 3x +2y cannot simultaneously be 5 and 6.**	
		Solve a system of two linear equations by substitution.	Surface
		Solve a system of two linear equations by elimination.	Surface
		Solve a system of two linear equations by graphing.	Surface
		Choose the most appropriate method of solving.	Deep

Auburn Washburn Unified School District 437 **AWLOs**

MATH 1 (02061/02062) 2019

GRADES 7-12

Number	Priority Level	STANDARDS/AW Learning Objectives	Instructional Depth
refers us to the state or national standard.	*helps us prioritize time and interventions.*	*Standards give us broad expectations. AWLOs describe local teaching expectations and are what we teach to address the standards.*	*describes the level at which the AWLOs are written, providing guidance for planning transformations. Boldfaced depth is instructional goal. Language and Social objectives are used to support goal.*
		Given two real-world situations, solve a system of equations; e.g., When does the company break even?	**Transfer**
A.REI.10	**Enhanced**	**Graph the solutions of a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality). ~~and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.~~**	
		Graph a linear inequality.	Surface
		After graphing a linear inequality, give possible solutions.	**Deep**
FUNCTIONS: INTERPRETING FUNCTIONS			
F.IF.1	**Enhanced**	**Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. ~~If f is a function and x is an element of its domain, then f(x)denotes the output of fcorresponding to the input x. The graph of f is the graph of the equation y=f(x)~~**	
		Identify the domain as the set of inputs (x values) and the range as the set of outputs (y values).	Surface
		If f is a function, each input is assigned to only one output.	**Deep**
F.IF.7		**Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.**	
F.IF.7a	**Mastery**	**Graph linear, ~~quadratic and absolute value functions~~ show intercepts, ~~maxima, minima~~ and end behavior.**	
		Graph linear equations.	Surface
		Graph linear equations using intercepts.	**Deep**
F.IF.8		**Write a function in different but equivalent forms to reveal and explain different properties of the function.**	
F.IF.8A	**Essential**	**Use different forms of linear functions, such as slope-intercept, standard, and point-slope form to show rate of change and intercepts.**	
		Recognize the components of slope-intercept form, standard form, and point-slope form.	Surface
		Compute x-intercept and y-intercept.	Surface
		Write a linear function using rate of change and/or intercepts.	**Deep**
GEOMETRY: CONGRUENCE			
G.CO.1	**Enhanced**	**Verify experimentally the properties of rotations, reflections, translations, and symmetry.**	
		Use patty paper or geometry software to recognize the properties of rotations, reflections, and translations.	**Surface**
G.CO.2	**Enhanced**	**Recognize transformations as functions that take points in the plane as inputs and give other points as outputs and describe the effect of translations, rotations, and reflections on two-dimensional figures.**	

Auburn Washburn Unified School District 437 AWLOs	MATH 1 (02061/02062) 2019	GRADES 7-12

Number	Priority Level	STANDARDS/AW Learning Objectives	Instructional Depth
refers us to the state or national standard.	*helps us prioritize time and interventions.*	*Standards give us broad expectations. AWLOs describe local teaching expectations and are what we teach to address the standards.*	*describes the level at which the AWLOs are written, providing guidance for planning transformations. Boldfaced depth is instructional goal. Language and Social objectives are used to support goal.*
		Use the coordinates to perform transformations; e.g., (x,y) --> (x+3, y-5) moves that point three right and five down.	**Surface**
G.CO.7	**Essential**	**Construct arguments about lines and angles using theorems. Theorems include vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent. ~~points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints. (Building upon standard in 8th grade Geometry)~~**	
		Understand angle pairs in two lines cut by a transversal.	Surface
		Properties of angle pairs given two parallel lines cut by a transversal.	**Deep**
GEOMETRY: EXPRESSING GEOMETRIC PROPERTIES WITH EQUATIONS			
G.GPE.6	**Essential**	**Use coordinates to prove simple geometric theorems algebraically, including the use of slope, distance, and midpoint formulas. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle.**	
		Given two ordered pairs, find the slope, distance, and midpoint.	Surface
		Using the distance formula, determine if two segments are congruent.	**Deep**
		Using midpoint, determine if a segment, line, or point is the bisector of the segment.	**Deep**
G.GPE.7	**Essential**	**Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems.**	
		Given the slope of two lines, determine if they are parallel, perpendicular, or neither.	Surface
		Given two points on each line, determine if a pair of lines are parallel, perpendicular, or neither, by calculating using slope.	**Deep**
GEOMETRY: SIMILARITY, RIGHT TRIANGLES, AND TRIGONOMETRY			
G.SRT.2	**Enhanced**	**Recognize transformations as functions that take points in the plane as inputs and give other points as outputs and describe the effect of dilations on two-dimensional figures.**	
		Use the coordinates to perform dilations; e.g., (x,y) --> (3x, 3y) dilates the shape by a factor of 3 from the origin.	**Surface**
NUMBER AND QUANTITY: REAL NUMBERS **STATISTICS: INTERPRETING CATEGORICAL AND QUANTITATIVE DATA**			
N.RN.1	**Mastery**	**Know and apply the properties of integer exponents to generate equivalent numerical and algebraic expressions.**	
		Use the properties of exponents to simplify expressions.	Surface
S.ID.6	**Mastery**	**Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.**	

Auburn Washburn Unified School District 437 AWLOs	MATH 1 (02061/02062) 2019	GRADES 7-12

Number	Priority Level	STANDARDS/AW Learning Objectives	Instructional Depth
refers us to the state or national standard.	*helps us prioritize time and interventions.*	*Standards give us broad expectations. AWLOs describe local teaching expectations and are what we teach to address the standards.*	*describes the level at which the AWLOs are written, providing guidance for planning transformations. Boldfaced depth is instructional goal. Language and Social objectives are used to support goal.*
		Given a set of data (table, list, etc.), interpret the rate of change and the intercept.	Surface
		Write the linear equation from the set of data.	**Deep**