- 8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. (First Nine Weeks)
- 8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. (First Nine Weeks)
- 8.F.A.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. (First Nine Weeks)
- 8.EE.B.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed. (First Nine Weeks)
- 8.EE.B.6 Use similar triangles to explain why the slope "m" is the same between any two distinct points on a nonvertical line in the coordinate plane; know and derive the equation y=mx for a line through the origin and the equation y=mx+b for a line intercepting the vertical axis at b. (First Nine Weeks)
- 8.F.B.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x,y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models and in terms of its graph or a table of values. (Second Nine Weeks)
- 8.F.A.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change. (Second Nine Weeks)
- 8.EE.C.7 Solve linear equations in one variable.

a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers).

b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. (Second Nine Weeks)

- 8.EE.C.8 Analyze and solve pairs of simultaneous linear equations.
 a. 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.
 b. 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 + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6. (Second Nine Weeks)
- 8.G.B.5 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two or three dimensions. (Third Nine Weeks)
- 8.G.B.6 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system. (Third Nine Weeks)
- 8.SP.A.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line and informally assess the model fit by judging the closeness of the data points to the line. (Third Nine Weeks)
- 8.SP.A.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. (Third Nine Weeks)
- 8.SP.B.4 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. Represent sample spaces for compound events using methods such as organized lists, tables, and tree diagrams. For an event described in everyday language, identify the outcomes in the sample space which compose the event. (Fourth Nine Weeks)

When creating lesson plans, incorporate the following standards throughout your lesson to insure students are successful.

Standards for Mathematical Practice	Literacy Skills for Mathematical Proficiency
 Make sense of problems and persevere in solving them. Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others. Model with mathematics. Use appropriate tools strategically. Attend to precision. Look for and make use of structure. Look for and express regularity in repeated reasoning. 	 Use multiple reading strategies. Understand and use correct mathematical vocabulary. Discuss and articulate mathematical ideas. Write mathematical arguments.

Please see resources included for tasks that incorporate these practices.

Domain Cluster Vacabulary Vacabulary Vacabulary Note ***8,EEA.2 Use square root and cube root symbols to represent solutions to equations of the form represent solutions to equations of the form ** p and * = p, where p is a positive rational number. Evaluate square roots of small perfect squares and cube forts of small perfect cubes. Know that $\sqrt{2}$ is irrational. rate ovaluate square roots and cube roots of small perfect Cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. cube roots of small perfect Cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. rate ovaluate square roots and cube roots of small perfect Cube roots of small perfect cubes. Vacabulate square roots and cube roots of small perfect Cube Perfect Square Root and informally that every number has rational or irrational. number. Integers rational or irrational. rational or irrational. number. Aug Ratical Sign rational or irrational. number. Integers rational or irrational. number. Aug Ratical Root Rational Number Aug Point Rational Number Fluency- Convert fractions to decimals and decimals fractions. *ACT 8.NS.A.2 Use rational approximations of irrational numbers, fucery- Convert fractions to decimals and decimals to fractions. *ACT I can estimate and find rational number. I rational Number Rational Number 13.15 Rational Number Fluency- Convert fractions to decimals and decimals to fractions. *ACT I can pot estimate and find rational numbers. I can compare and order real numbers. I can pot estimate and numbers. I can compare and order real numbers. I can co				First 9 Weeks			
Note	Domain	Cluster		Standard	Student Outcomes	Vocabulary	
Note: the problem is a positive rational number. represent solutions to equations of the form x ² = p and x ² = p, where p is a positive rational number. root symbols to represent solutions to equations of the form x ² = p and x ³ = p. Radicand (and (b)	s	ger	***8.EE.A.2 Use square re	root and cube root symbols to	I can use square root/ cube	Radical	Aug
Image: Stand Stan	tions		represent solutions to eq	quations of the form	root symbols to represent	Radicand	6-8
Upper	luat	i br	x ² = p and x ³ = p, where p	o is a positive rational number.	solutions to equations of the	Exponent	
Purpure version of version of small perfect cubes. Know that √2 is irrational. I can evaluate square roots and cube roots of small perfect Quare outer. Cube Root Perfect Cube Perfect Quare outer. Radical Sign Fluency- Evaluating squares and cubes without a calculator. "ACT" Radical Sign Aug I can classify numbers as irrational. Understand informally that every number has a decimal expansion, for rational numbers show that the decimal expansion, for rational numbers. Show that the decimal expansion repeats eventually, and convert a decimal into a rational number. I can classify number. Rational Number 9-10 I can outer are peating number. Fluency- Convert fractions to decimals and decimals to fractions. I can estimate and find rational approximations of irrational numbers. I can estimate and find rational approximations of irrational numbers. Number Line Rational Number Number Line Rational Number No continue on to get better approximations of irrational numbers. I can estimate and find rational numbers. I can compare and order real number line diagram. I can compare and order real number line diagram. I can compare and order real number line diagram. I can compare and order real number line diagram. I can compare and order real number line diagram. I can compare and order real number line diagram. I can compare and order real number line diagram. I can compare and order real number line diagram. I can compare and order real number line diagram. I can	d Eq	s ai nts.	Evaluate square roots of s	small perfect squares and cube	form $x^2 = p$ and $x^3 = p$.	Power	
Note Perfect Square Square Root Radical Sign Perfect Square Square Root Radical Sign Aug Perfect Square Square Root Radical Sign Note 8.NS.A.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. I can classify numbers as rational or irrational. Integers Irrational Number Aug P-10 Number September Perfect Supare Supare Root Rational expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. I can classify numbers as rational or irrational number. Integers Irrational Number Aug P-10 Number September Perfect Supare Adecimal expansion which repeats eventually into a rational number. I can convert a repeating decimal expansion of for rational number. I can solv that decimals repeat eventually. Number Nere Number September Whole Numbers Number Rational Number Aug P-10 Number September Perfect Supare suparimeter of expressions (e.g., π^2). For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations. I can compare and order real number fine diagram. I can compare and order real number fine diagram. Order Real Numbers Task Minnesota Real Numbers Sputem Edutoolbox	anc	ical	roots of small perfect cub	bes. Know that $\sqrt{2}$ is irrational.	I can evaluate square roots and	Cube Root	
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Performapproximately on a number line diagram, and estimate the value of expressions (e.g., π²). For example, by truncating the decimal expansion of √2, show that √2 is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.numbers.Rational NumberFluency- Practice long division.Fluency- Practice long division.I can compare and order real numbers.I can compare and order real numbers.I can compare and order real numbers.I can compare and order real numbers.Fluency- Practice long division.Fluency- Practice long division.Comparing Rational and Irrational Number System EdutoolboxComparing Irrational Numbers Square and Cube RootsOrder Real Numbers Task Minnesota Real Numbers	nbe	aln	to compare the size of irra	rational numbers, locate them	approximations for irrational	Number Line	13-15
PValue of expressions (e.g., π²). For example, by truncating the decimal expansion of √2, show that √2 is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.I can plot estimated values on a number line diagram.Fluency- Practice long division.Fluency- Practice long division.I can compare and order real numbers.Repeating Decimals Real Number RaceComparing Rational and Irrational Number System EdutoolboxComparing Irrational Numbers Square and Cube RootsOrder Real Numbers Task Minnesota Real Numbers	NUN	at a ion:	approximately on a numb	ber line diagram, and estimate the	numbers.	Rational Number	
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Continue on to get better approximations. numbers. Fluency- Practice long division. Fluency- Practice long division. Repeating Decimals Comparing Rational and Irrational Real Number Race Number System Edutoolbox Square and Cube Roots Minnesota Real Numbers		Å Å	and 2, then between 1.4 a	and 1.5, and explain how to	I can compare and order real		
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Repeating Decimals Real Number RaceComparing Rational and Irrational Number System EdutoolboxComparing Irrational Numbers Square and Cube RootsOrder Real Numbers Task Minnesota Real Numbers		at th		Number Syst	tem Resources		
Real Number Race Number System Edutoolbox Square and Cube Roots Minnesota Real Numbers		, the	Repeating Decimals C	Comparing Rational and Irrational	Comparing Irrational Numbers	Order Real Number	s Task
		N OC	Real Number Race	Number System Edutoolbox	Square and Cube Roots	Minnesota Real Nur	mbers
<u>Edutoolbox</u>		Ϋ́			<u>Edutoolbox</u>		

	First 9 Weeks						
Domain	Cluster	Standard	Student Outcomes	Vocabulary			
		***8.EE.A.1 Know and apply the properties of integer	I know the properties of integer	Base	Aug		
		exponents to generate equivalent numerical	exponents.	Exponent	16-24		
		expressions. For example, 3 ² x 3 ⁻⁵ = 3 ⁻³ = 1/3 ³ = 1/27	I can apply the properties of	Integers			
	ents		integer exponents to generate	Power			
	0006	Fluency- Adding, subtracting, multiplying, and dividing	equivalent numerical				
ons	exp	integers.	expressions.				
uati	ger	*ACT					
Equ	inte	***8.EE.A.3 Use numbers expressed in the form of a	I can use numbers in the form	Base	Sept		
and	pu	single digit times an integer power of 10 to estimate very	of a single digit times an	Exponent	4-5		
suc	als a	large or very small quantities, and to express how many	integer to the power of 10 to	Power			
ssic	dica	times as much one is than the other. For example,	estimate very large or very	Scientific Notation			
kpre	h ra	3×10^8 and the population of the world as 7×10^9 and	I can express how many times				
Ê	Work with	determine that the world population is more than 20	as much one is than the other.				
		times larger.	I can compare and order				
			numbers expressed in scientific				
		Fluency- Adding, subtracting, multiplying, and dividing	notation.				
		integers.					
	6	***8.EE.A.4 Perform operations with numbers expressed	I can perform operations	Measurement	Sept		
	ents	in scientific notation, including problems where both	(addition, subtraction,	Operations	6-14		
	uoc	decimal and scientific notation are used. Use scientific	multiplication, and division) with	, (addition,			
ons	exl	notation and choose units of appropriate size for	numbers in scientific notation.	subtraction,			
uati	eger	measurements of very large or very small quantities	I can use scientific notation and	multiplication, and			
l Eq	inte	(e.g., use millimeters per year for seafloor spreading).	choose appropriate units for	division)			
and	bue	Interpret scientific notation that has been generated by	measures.	Scientific Notation			
suc	als a	technology.					
essio	adic						
xpre	h ra						
Ш	wit	Fluency- Adding, subtracting, multiplying, and dividing					
	ork	integers.					
	3	*ACT					

	Expor	nent and Scientific Notation Resources		
	Exponents and Scientific Notation	Extending Exponents	Scientific Notation Edutoo	lbox
	Exponent Edutoolbox	Applying Properties of Exponents Lesson		

			First 9 Weeks			
Domain	Cluster	Standa	ard	Student Outcomes	Vocabulary	
		***8.F.A.1 Understand that a fu	unction is a rule that	I can describe the difference	Correspond	Sept
		assigns to each input exactly on	e output. The graph of a	between a relation and a	Function	17-18
		function is the set of ordered pa	airs consisting of an input	function.	Input	
		and the corresponding output.		I can compare relations and	Ordered Pair	
				functions represented	Output	
	JS.			differently (graph, mapping,	Domain	
	tion			equations, set notation,	Range	
	nnc			table).	Mapping	
	are f	*ACT			Set Notation	
S	bdm	***8.F.B.5 Describe qualitatively	y the functional relationship	I can describe the relationship	Constant	Sept
tion	CO	between two quantities by analy	yzing a graph (e.g., where	between two quantities by	Decreasing	19-21
nct	and	the function is increasing or deci	reasing, linear or	analyzing a graph.	Function	
Ę	ite,	nonlinear). Sketch a graph that e	exhibits the qualitative	I can sketch a graph of a	Increasing	
	alua	features of a function that has b	een described verbally.	function using its verbal	Linear	
	eva			description.	Nonlinear	
	ine,			l can interpret real-world	Sketch	
	Def			linear and nonlinear		
		*ACT		qualitative graphs.		
			Functions Reso	ources		
		Distance- Time Graphs	Linear Graphs	Stacking Cups	Functions Assessm	nent Task
		Functions Edutoolbox	<u>Shelves</u>	Qualitative Graphs		
				<u>Edutoolbox</u>		

			First 9 Weeks			
Domain	Cluster	Stand	ard	Student Outcomes	Vocabulary	
	L	***8.EE.B.5 Graph proportiona	ll relationships,	I can graph proportional	Proportional Relationship	Sept
	леа	interpreting the unit rate as the	e slope of the graph.	relationships recognizing	Slope	24-28
	d lir	Compare two different proport	tional relationships	slope.	Unit Rate	
	an	represented in different ways.	For example, compare a	I can compare proportions		
	nes,	distance-time graph to a distan	nce-time equation to	represented in different		
	s, lii	determine which of two movin	g objects has greater	forms.		
	hip	speed.				
	suo					
S	elati	Fluency- Practice division.				
ion	al re	*ACT				
luat	ion	***8.EE.B.6 Use similar triangle	es to explain why the slope	I can use similar triangles	Derive	Oct
d Eq	oort ons.	m is the same between any two	o distinct points on a non-	to explain same slope.	Non-Vertical Line	1-5
and	atic	vertical line in the coordinate p	plane; derive the equation	I can derive y=mx through	Coordinate Plane	
suc	nba u a	y = mx for a line through the or	rigin and the equation	the point (0,0), using rise	Origin	
essio	wee	y = mx + b for a line interceptin	ng the vertical axis at b.	over run.	Similar Triangles	
xpre	bet			I can derive y=mx+b	Vertical	
Û	suc			through the point (0,b),	Intercept (Y-Intercept)	
	ctic			using patterns,	Slope	
	nne			input/output tables.		
	c co	Fluency- Practice subtraction ar	nd division of integers.	I can derive y=mx+b from a		
the		*ACT		graph of a line.		
	and		Proportional Relation	onship Resources		
	erst	Buying Cars Defining Lines by	Bike Ride Journey	Comparing Lines and Line	ear Linear Functions M	odule
	lnde	Points, Slopes, and Equations	Similiar Triangles Edutoolbo	x Equations	Proportional Relatio	nships
	L L				<u>Edutoolbox</u>	

		Second 9 Weeks			
Domain	Cluster	Standard	Student Outcomes	Vocabulary	
	, i	***8.F.B.4 Construct a function to model a linear	I can construct a linear	Rate of Change	Oct
	ities	relationship between two quantities. Determine the rate	function.	Per	8-12
	del anti	of change and initial value of the function from a	I can determine and interpret	Construct	
	nb . ou	description of a relationship or from two (x, y) values,	the slope (rate of change) and	Initial Value	
	een	including reading these from a table or from a graph.	y-intercept.	Linear Function	
	ons etw	Interpret the rate of change and initial value of a linear		Quantities	
	ncti s be	function in terms of the situation it models, and in terms		Slope	
	Use fui onship	of its graph or a table of values.			
	relati	Fluency- Practice comparing numbers. *ACT			
		***8.F.A.2 Compare properties of two functions each	I can compare two functions	Algebraic Expressions	Oct
	js.	represented in a different way (algebraically, graphically,	represented differently	Linear Functions	15-26
		numerically in tables, or by verbal descriptions). For	(algebraically, graphically,	Properties	
su		example, given a linear function represented by a table of	tables, verbal descriptions,	Rate of Change	
ctio		values and a linear function represented by an algebraic	mapping).	Table of Values	
Fun	ctio	expression, determine which function has the greater rate		Mapping	
	Inne	of change.			
	d compare 1	Fluency- Comparing Numbers.			
	and	***8.F.A.3 Interpret the equation y = mx + b as defining a	I can define the properties of a	Intercept	Oct
	ate,	linear function, whose graph is a straight line; give	linear function in the form	Linear	29-31
	alua	examples of functions that are not linear. For example, the	y=mx+b.	Nonlinear	
	, ev	function A = s^2 giving the area of a square as a function of	I can determine whether a	Slope	
	ine	its side length is not linear because its graph contains the	function is linear or nonlinear.	Vertical	
	Def	points (1,1), (2,4) and (3,9), which are not on a straight line.		Y-Intercept	
		Fluency- Put equations in slope-intercept form.			
		*ACT			

	Linear Relationship Resources		
Constructing Linear Functions Edutoolbox	Identifying Slope and Y-intercept Edutoolbox	Comparing Functions Edutoo	<u>lbox</u>

		Second 9 Weel	ks				
Domain	Cluster	Standard		Student Outcor	nes	Vocabulary	
		***8.EE.C.7 Solve linear equations in one variable.		l can solve linear equatio	ons in one	Infinitely Many Solutions	Nov
		a. Give examples of linear equations in one variable	with one	variable.		No Solution	1-20
	ear	solution, infinitely many solutions, or no solutions.	Show	I can transform equation	s to	One Solution	
	line	which of these possibilities is the case by successive	ly	simpler form.		Simpler Form	
	0M	transforming the given equation into simpler forms,	, until an	l can determine the num	ber of	Equivalent	
	of t	equivalent equation of the form x = a, a = a, or a = b	results	solutions to a single varia	able	Linear	
suc	sms	(where a and b are different numbers).		equation.		Solution	
latic	yste	b. Solve linear equations with rational number coef	ficients,	I can solve linear equatio	ons with	Solve	
Equ	d sr	including equations whose solutions require expand	ling	rational coefficients inclu	uding using	Transform	
bue	s an	expressions using the distributive property and colle	ecting like	the distributive property	and	Variable	
us a	ion	terms.		collecting like terms.		Equation	
ssio	luat			l can solve multi-step equ	uations	Expression	
bre	r eq			with variables on both si	des.	Simplify	
EX	Jear					Coefficient	
<u>ii</u>	e li	Fluency-Simplifying expressions, and 1 and 2 step eq	uations.			Like Term	
solv		*ACT				Distributive Property	
	and s	One V	ariable Equa	ations Resources			
	lyze atio	Equations Edutoolbox Buil	ding and Solv	ving Linear Equations		Meal Out	
	Ana equi	Solving Equations in One Variable Lesson	<u>How o</u>	Id are they?	<u>T</u> †	e Sign of Solutions Task	

	Second 9 Weeks						
Domain	Cluster	Standar	ď	Student Outcomes	Vocabulary		
		***8.EE.C.8 Analyze and solve pair	rs of simultaneous linear	I can analyze and solve pairs of	Simultaneous	Nov 26-	
	suo	equations.		simultaneous linear equations by	Systems of Equations	Dec 18	
	uati	a. Understand that solutions to a	system of two linear	graphing.	Intersection		
	bə .	equations in two variables corresp	oond to points of	I can analyze and solve pairs of	One Solution		
	lear	intersection of their graphs, becau	se points of intersection	simultaneous linear equations	Infinitely Many Solutions		
	o lir	satisfy both equations simultaneo	usly.	algebraically.	No Solution		
	tw	b. Solve systems of two linear equ	ations in two variables	I can analyze the graph of system of	Parallel		
suc	s of	algebraically, and estimate solutio	ons by graphing the	equations to determine the number			
atic	em	equations. Solve simple cases by in	nspection. For example, 3x +	of solutions.			
Equ	syst	2y = 5 and 3x + 2y = 6 have no solu	ition because 3x + 2y cannot	I can solve real world and			
pu	pu	simultaneously be 5 and 6.		mathematical problems leading to			
ıs a	ns a	c. Solve real-world and mathematic	cal problems leading to two	two linear equations in two			
sion	atio	linear equations in two variables. F	or example, given	variables.			
ores	enb	coordinates for two pairs of points,	, determine whether the line				
Exp	ar e	through the first pair of points inte	rsects the line through the				
	ine	second pair.					
	ve l						
sol		Fluency-Solve equations.					
	and	*ACT					
	yze		Systems of Equat	ions Resources			
	naly	Baseball Jersey Assessment	Classify Solutions to Syst	ems Performance Tasks	Fixing the Furn	<u>ace</u>	
	A	<u>Task</u>	of Equations	Systems Edutoolbox	Baseball Jersey L	esson	

Third 9 Weeks							
Domain	Cluster	Standa	rd		Student Outcomes	Vocabulary	
		***8.G.B.4 (was 8.G.6) Explain a p	proof of the Pythagorean	l can	explain the proof of the	Converse	Jan
		Theorem and its converse.		Pytha	agorean Theorem.	Hypotenuse	7-18
				l can	use the Pythagorean Theorem	Leg	
				to de	termine if a triangle is a right	Pythagorean Theorem	
	Ë.			trian	gle. (use the converse)	Right Triangle	
	SOLE	Fluency- Evaluative and estimate	square roots.			Right Angle	
	The	***8.G.B.5 (was 8.G.7) Apply the	Pythagorean Theorem to	lcan	determine the unknown side	Hypotenuse	
	ean	determine unknown side lengths in right triangles in real-		lengt	h in right triangles in real world	Leg	
	gori	world and mathematical problem	ns in two and three	math	ematical problems.	Pythagorean Theorem	
	tha	dimensions.		l can	determine the unknown side		
letr	PV			lengt	h in two and three dimensional		
Som	/ the	Fluency- Fluency- Evaluative and	estimate square roots.	geon	netric objects.		
Ğ	(Idd	*ACT					
	d a	***8.G.B.6 (was 8.G.8) Apply the	Pythagorean Theorem to	l can	apply the Pythagorean Theorem	Distance	
	d an	find the distance between two po	pints in a coordinate system.	to fin	d the distance between two	Hypotenuse	
	tano			point	s in a coordinate system.	Leg	
	erst	Fluency- Evaluative and estimate	square roots.			Order Pair	
	pul	*ACT				Coordinate Plane	
			Pythagorean Th	eorer	n Resources		
		Discovering the Pythagorean	Schoolyard Problem		Shodor Interactive Lesson	Fire in Pythagorville	Task
		Pythagorean Theorem Module	Jane's TV		P-Theorem and Converse	P-Theorem and Missing	Length
		Distance Edutoolbox			<u>Edutoolbox</u>	<u>Edutoolbox</u>	

	Third 9 Weeks						
Domain	Cluster	Standard	Student Outcomes	Vocabulary			
	e	8.G.A.1 Verify experimentally the properties of rotations,	I can verify experimentally the	Reflection	Jan 22-		
	d us	reflections, and translations:	properties of rotations, reflections,	Rotation	Feb 8		
	of	a. Lines are taken to lines, and line segments to line segments	and translations.	Translation			
	cts ures	of the same length.	I can verify that angle measures are	Parallel			
	effe figu	b. Angles are taken to angles of the same measure.	unchanging through	Transformation			
	he (nal	c. Parallel lines are taken to parallel lines.	transformations.				
~	oe t nsio		I can verify that parallelness is				
ıetı	mel		unchanging through				
eon	des D-di	Fluency- Identify scale factor.	transformations.				
U	two	8.G.A.2 (WAS 8.G.3) Describe the effect of dilations,	I can describe the effects of	Coordinates			
	nd :	translations, rotations, and reflections on two- dimensional	transformations on two	Dilation			
	rsta	figures using coordinates.	dimensional figures using	Reflection			
	nati	3	coordinates.	Rotation			
	lor forr		l can derive the rules for	Scale Factor			
	ans	Fluency- Identify scale factor.	transformations on a	Translation			
	r t	*ACT	coordinate plan.	Two- Dimensional			
		Transformation	Resources				
		Congruence Module <u>Transformations</u>	Congruence and Similarity	Unchanging Prope	erties		
		Transformations Edutoolbox		<u>Edutoolbox</u>			

Third 9 Weeks							
Domain	Cluster	Standard		Student Outcomes	Vocabulary		
	se	8.G.A.3 (WAS 8.G.5) Use informal arguments	to	I can calculate and justify the	Adjacent Angles	Feb	
	n pi	establish facts about the angle sum and exte	rior angle of	triangle sum of angle rule.	Alternate Exterior Angles	11-22	
	of s ar	riangles, about the angles created when par	allel lines are cut	I can classify angles formed b	 Alternate Interior Angles 		
	ects ure	면by a transversal, and the angle-angle criterio	n for similarity of	parallel lines and transversals	Complementary Angles		
	eff(I fig	Entriangles. For example, arrange three copies	of the same	I can classify angles as similar	or Congruent		
	the ona	ច gtriangle so that the sum of the three angles a	appears to form a	non-similar using angle- angle	Corresponding Angles		
≥	be t nsid	line, and give an argument in terms of transv	versals why this is	criterion.	Diagonals		
net	scri ime	မျှ မျှနှစ.			Parallel Lines		
Geor	- di				Perpendicular Lines		
	anc two				Similar		
	no '				Supplementary Angles		
	rsta	EFluency- Review angle vocabulary.			Transversal		
	nde mat	Ê*ACT			Vertical Angles		
	U sfor	Angle Relationship Resources					
	tran	Similar Triangles	Find the	missing angle	Angles Edutoolbox		

Third 9 Weeks							
Domain	Clust	er	Standard		Student Outcomes	Vocabulary	
Geometry	cal		8.G.C.7 (was 8.G.9) Know and un	derstand the formulas for the	I can identify and apply formulas	Area	Feb 25-
	nati e of	res	volumes of cones, cylinders, and	spheres and use them to solve	to find the volume of cones and	Circumference	Mar 1
	hen	ohe	real-world and mathematical pro	blems.	cylinders.	Cone	
	nat vol	ld SI			I can identify and apply formulas	Cylinder	
	nd r ing	, an			to find the volume of spheres.	Diameter	
	d ai Volv	nes				Radius	
	vorl s in	s in s	Fluency- Evaluate squares, cubes, s	square roots, and cube roots.		Sphere	
	em: em:	lers	*ACT			Volume	
	'e re robl	vling	ve re robl vling		Volume Resou	rces	
	Solv	ΞÚ	How many Jelly Beans?	Volume Edutoolbox	Comparing Snow Cones	Matchsticks Assessn	nent Task

Third 9 Weeks							
Domain	Cluster	Standard	Student Outcomes	Vocabulary			
		8.SP.A.1 Construct and interpret scatter plots for	I can construct and interpret	Bivariate Data	Mar		
		bivariate measurement data to investigate patterns of	scatterplots.	Clustering	4- 15		
	ita.	association between two quantities. Describe patterns such as	l can describe patterns such as	Linear Association			
Statistics and Probability	ep a	clustering, outliers, positive or negative association, linear	clustering, outliers, positive or	Negative Correlation			
	riat	association, and nonlinear association.	negative association, linear and	No Correlation			
	iva		nonlinear association.	Nonlinear Association			
	in b			Outlier			
	ion			Positive Correlation			
	ciati			Scatter Plot			
	ssoc			Strong Correlation			
	ofa	Fluency- Write equations of lines.		Weak Correlation			
	tterns (8.SP.A.2 Know that straight lines are widely used to model	I can construct the line of best	Line of Best Fit			
		relationships between two quantitative variables. For	fit for a scatterplot.	Linear Association			
	ed a	scatter plots that suggest a linear association, informally fit a	l can determine the equation	Strong Correlation			
	gate	straight line, and informally assess the model fit by judging the	for the line of best fit in slope	Weak Correlation			
	estig	closeness of the data points to the line.	intercept form.	No Correlation			
	nve		l can select the best line of				
	—	Fluency- Write equations of lines.	best fit for a set of bivariate				
		*ACT	data given multiple choices.				

Third/Fourth 9 Weeks						
Domain	Cluster	Standard	Student Outcomes	Vocabulary		
		8.SP.A.3 Use the equation of a linear model to solve problems in	I can use the equation of a line	Intercept	Mar	
	fe.	the context of bivariate measurement data, interpreting the	of best fit to make predictions.	Rate of Change	4-15	
	rns aria	slope and intercept. For example, in a linear model for a biology	I can interpret the slope of a line	Slope		
	atte biv	experiment, interpret a slope of 1.5 cm/hr as meaning that an	of best fit.			
	e pö	additional hour of sunlight each day is associated with an	I can interpret the intercepts of			
	ition	additional 1.5 cm in mature plant height.	a line of best fit.			
	esti ocia					
	lnv ass	Fluency- Write equations of lines.				
		*ACT				
ility	σ	8.SP.B.4 (Was 7.SP.C8) Find probabilities of compound events	I can find probabilities of	Simple Probability	Mar	
oabi	, an	using organized lists, tables, tree diagrams, and simulation.	compound events.	Compound Probability	18-22	
Prof	nse	Understand that, just as with sample events, the probability of	l can represent sample spaces	Tree Diagram		
l pu	, do	a compound event is the fraction of outcomes in the sample	for compound events.	Sample Space		
cs a	velo lels.	space for using methods such as organized lists, tables, and tree	I can identify outcomes in the	Event		
istic	l de nod	diagrams. For an event described in everyday language (e.g.	sample spaces that compose the	Simulation		
Stat	and ty n	"rolling double sixes"), identify the outcomes in the sample	event.	Sample Event		
0,	ses abili	space which compose the event.		Outcome		
	ces					
	e pr	Fluency- Simplify fractions.				
	uati	*ACT				
	char eval	Statistics Reso	urces			
	ate (Birds'Eggs/IllustrativeBirds'Eggs Prob and Stats Assessment Task	Taxi Fares	Arm Span vs Heigh	n <u>t</u>	
	tige	Diagram Texting and Grades Introduction Activity	Brain Weight	Celebrity Age		
	Ives	Scatter Plots Edutoolbox	Line of Best Fit Edutoolbox			
	1					

2018-2019 8th Grade Math Curriculum

After Spring Break: We assumed 3 weeks before testing like the 2017-2018 school year.

Week 1 April 1-5

8.NS.A- Know that there are numbers that are not rational and approximate them by rational numbers.

8.EE.A- Work with radicals and integer exponents.

- 8.F.A- Define, evaluate, and compare functions.
- 8.F.B- Use functions to model relationships between quantities.

Week 2 April 8-12

8.EE.B- Understand the connections between proportional relationships, lines, and linear equations.

8.EE.C- Analyze and solve linear equations and systems of two linear equations.

Week 3 April 15-18

8.G.A- Understand and describe the effects of transformations on two-dimensional figures and use informal arguments to establish facts about angles.

8.G.B- Understand and apply the Pythagorean Theorem.

8.G.C- Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

8.SP.A- Investigate patterns of association in bivariate data.

8.SP.B- Investigate chance processes and develop, use, and evaluate probability models.

We assume April 22-26 testing???

April 29-May 21

Review Equations every day for the first part of class (bellwork, etc) Plotting Points/Evaluating Functions (Make a table and graph) Combining Like Terms with Exponents (A1. A. APR.A. 1 Understand that polynomials form a system of analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiply polynomials.) Basic Math Skills (integer operations, etc.)