



1st nine weeks

2nd nine weeks

3rd nine weeks

Pass	Pre Algebra (6 th grade)	# of days	Assessment - Benchmark questions
3	Geometry	20	12
3.1	Compare & contrast the basic characteristics of three-dimensional figures (pyramids, prisms, cones and cylinders).	5	4
(8)3.1	Construct models, sketch (from different perspectives), and classify solid figures such as rectangular solids, prisms, cones, cylinders, pyramids, and combined forms.		
3.2	Compare and contrast congruent and similar figures.	5	4
(8)4.2	Apply knowledge of ratio and proportion to solve relationships between similar geometric figures.		
3.3	Identify the characteristics of the rectangular coordinate system and use them to locate points and describe shapes drawn in all four quadrants.	10	4
2	Number Sense and Operations	20	20
2.1	Number Sense: Convert, compare, and order decimals, fractions, and percents using a variety of methods.	5	5
2.2b	Multiply and divide decimals with one or two-digit multipliers or divisors to solve problems.	5	5
2.2d	Use the basic operations on integers to solve problems.	10	10
(8)2.2c	Simplify numerical expressions with rational numbers, exponents, and parentheses using order of operations.		
1	Algebraic Reasoning	25	18
1.1	Generalize and extend patterns and functions using tables, graphs, and number properties (e.g., number sequences, prime and composite numbers, recursive patterns like the Fibonacci numbers).	5	4
(8)1.1b	Graph and interpret the solution to one- and two-step linear equations on a number line with one variable and on a coordinate plane with two variables.		
(8)1.1c	Predict the effect on the graph of a linear equation when the slope or y-intercept changes (e.g., make predictions from graphs, identify the slope or y-intercept in the equation $y = mx + b$ and relate to a graph).		
1.2	Write algebraic expressions and simple equations that correspond to a given situation.	5	4
(8)1.1a	Model, write, and solve multi-step linear equations with one variable using a variety of methods to solve application problems.		
1.3	Use substitution to simplify and evaluate algebraic expressions (e.g., if $x = 5$ evaluate $3 - 5x$).	5	5
(8)1.1d	Apply appropriate formulas to solve problems (e.g., $d=rt$, $I=prt$).		
1.4	Write and solve one-step equations with one variable using number sense, the properties of operations, and the properties of equality (e.g., $1/3x = 9$).	10	5
2	Number Sense and Operations	20	15
2.2a	Multiply and divide fractions and mixed numbers to solve problems using a variety of methods.	10	10
2.2e	Build and recognize models of multiples to develop the concept of exponents and simplify numerical expressions with exponents and parentheses using order of operations.	10	5
(8)2.1	Number Sense: Represent and interpret large numbers and numbers less than one in exponential and scientific notation.		
(8)2.2a	Use the rules of exponents, including integer exponents, to solve problems (e.g., $72 \cdot 73 = 75$, $3 \cdot 10 \cdot 38 = 3 \cdot 2$).		
(8)2.2b	Solve problems using scientific notation.		
	Review Questions from 1st nine weeks		10
4	Measurement	10	7
4.1	Use formulas to find the circumference and area of circles in terms of pi.	5	4
(8)4.1	Develop and apply formulas to find the surface area and volume of rectangular prisms, triangular prisms, and cylinders (in terms of pi).		
(8)4.3	Find the area of a "region of a region" for simple composite figures and the area of cross sections of regular geometric solids (e.g., area of a rectangular picture frame).		
4.2	Convert, add, or subtract measurements within the same system to solve problems (e.g., $9' 8'' + 3' 6''$, $150 \text{ minutes} = __ \text{ hours and } __ \text{ minutes}$, $6 \text{ square inches} = __ \text{ square feet}$).	5	3

	2	Number Sense and Operations	15	10
	2.2c	Estimate and find solutions to single and multi-step problems using whole numbers, decimals, fractions, and percents (e.g., $7/8 + 8/9$ is about 2, $3.9 + 5.3$ is about 9).	15	10
	5	Data Analysis	15	10
	5.1	Data Analysis: Organize, construct displays, and interpret data to solve problems (e.g., data from student experiments, tables, diagrams, charts, graphs).	5	3
	(8)5.1	Data Analysis: Select, analyze and apply data displays in appropriate formats to draw conclusions and solve problems.		
	5.2	Probability: Use the fundamental counting principle on sets with up to five items to determine the number of possible combinations.	5	3
	(8)5.2	Probability: Determine how samples are chosen (random, limited, biased) to draw and support conclusions about generalizing a sample to a population (e.g., is the average height of a men's college basketball team a good representative sample for height predictions?).		
	5.3	Central Tendency: Find the measures of central tendency (mean, median, mode, and range) of a set of data (with and without outliers) and understand why a specific measure provides the most useful information in a given context.	5	4
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		Review Questions from 1st & 2nd nine weeks		23

4th nine weeks		Review for OCCT		
		After OCCT testing -		
	1	(8) Algebraic Reasoning: Patterns and Relationships		
	(8)1.2	Inequalities: Model, write, solve, and graph one- and two-step linear inequalities with one variable.	TBD	
	3	(8) Geometry		
	(8)3.2	Develop the Pythagorean Theorem and apply the formula to find the length of line segments, the shortest distance between two points on a graph, and the length of an unknown side of a right triangle.	TBD	