

## BJU Press - 8th Grade - Pre-Algebra - Quarter 3 Map

Week	Unit/ Lessons	Submit	Objectives
Week 1	Chapter 8: Applying Equations and Inequalities	Submit Lesson 8.2 p 321	<ul> <li>Students will be able to</li> <li>Chapter Review and Test</li> <li>Chapter 8: Applying Equations and Inequalities</li> <li>Section 8.1: Simplifying Equations <ol> <li>Solve equations requiring the use of the Distributive Property in order to eliminate parentheses and combine like terms.</li> </ol> </li> <li>Section 8.2: Variables on Both Sides <ol> <li>Solve an equation with variables on both sides.</li> </ol> </li> <li>Section 8.3: Applying Equations <ol> <li>Write and solve advanced equations using information presented in a word problem.</li> <li>Write and solve equations for word problems involving consecutive integers, consecutive even integers and consecutive odd integers.</li> <li>Write and solve equations for word problems using d=rt, including those requiring the rate to be adjusted due to wind or current.</li> </ol> </li> </ul>
Week 2	Chapter 8: Applying Equations and Inequalities cont.		<ul> <li>Students will be able to</li> <li>Section 8.4: Solving Inequalities <ol> <li>Solve and graph an inequality requiring at least two steps.</li> </ol> </li> <li>Section 8.5: Applying Inequalities <ol> <li>Write and solve inequalities for problem situations.</li> <li>Apply the trichotomy axiom to problem situations</li> </ol> </li> <li>Chapter 8 Review and Test</li> </ul>

Week 3	Chapter 9 : Relations and Functions		<ul> <li>Students will be able to</li> <li>Section 9.1: The Coordinate Plane <ol> <li>Name the parts of the coordinate plane</li> <li>Graph points on the coordinate plane</li> </ol> </li> <li>Section 9.2: Relations <ol> <li>Find the domain and range of a relation.</li> <li>Write ordered pairs from a relation given as a graph or as an equation.</li> </ol> </li> <li>Section 9.3 Functions <ol> <li>Determine whether or not a relation is a function using a listing of the relation, circle mappings, or a graph of the relation.</li> <li>Use standard function notation to find a range value.</li> <li>Determine whether or not a relation is a function using the vertical line test.</li> </ol> </li> <li>Section 9.4 Graphing Linear Functions <ol> <li>Determine whether or not a point is a solution for a given equation.</li> <li>Graph a function using a table of values.</li> </ol> </li> <li>Section 9.5 Slope <ol> <li>Determine the slope of a line from its graph.</li> <li>Determine the slope of a line using the slope formula.</li> </ol> </li> </ul>
Week 4	Chapter 9 : Relations and Functions	Submit chapter 9 Test.	<ul> <li>Students will be able to</li> <li>Section 9.6 Slope-Intercept Form <ol> <li>Find the coordinates of the <i>x</i>- and <i>y</i>- intercepts for a line written in standard form and use the intercepts to graph the line.</li> <li>Change a linear equation to slope-intercept form and use the slope-intercept form to graph the line.</li> </ol> </li> <li>Section 9.7 Direct Variation <ol> <li>Identify a direct variation equation and state the constant of variation.</li> <li>Graph a direct variation equation.</li> <li>Find the constant of variation (k) when the values of <i>x</i> and <i>y</i> are given.</li> </ol> </li> <li>Section 9.8 Graphing Linear Inequalities in the Plane. <ol> <li>Graph a linear inequality.</li> </ol> </li> <li>Chapter 9 Review</li> <li>Chapter 9 Test</li> </ul>
Week 5	Chapter 10 Statistics and Reality		<ul> <li>Students will be able to</li> <li>Chapter 10 Section 10.1 Statistical Measures <ol> <li>Identify a group of objects as most likely a population or as a sample.</li> <li>Identify the type of sample begin described.</li> </ol> </li> <li>Section 10.1 Statistical Measures <ol> <li>Identify a group of objects as most likely a population or as a sample.</li> </ol> </li> </ul>

			<ol> <li>Identify the type of sample being described.</li> <li>Find the range, mean, median and mode for a set of data.</li> <li>Section 10.2 Diagramming Data         <ol> <li>Find the quartiles and the interquartile range for a set of data.</li> <li>Construct a box-and-whisker diagram for a set of data.</li> <li>Construct a stem-and-leaf diagram and a scatterplot for a set of data.</li> </ol> </li> <li>Section 10.3 Histograms         <ol> <li>Construct a frequency distribution table, an interval frequency table, or a histogram for a set of data.</li> </ol> </li> </ol>
Week 6	Chapter 10 Statistics and Reality cont.		<ul> <li>Students will be able to</li> <li>Section 10.4 Graphing Data <ol> <li>Interpret information from a bar graph, line graph, and pie chart.</li> <li>Select the best graph or diagram with which to represent a set of data</li> <li>Construct a bar graph, line graph, or pie chart from a set of data.</li> </ol> </li> <li>Section 10.5 <ol> <li>Use a tree diagram to list all possible outcomes.</li> <li>Use the Fundamental principle of Counting to find the total number of possible outcomes.</li> </ol> </li> <li>Section 10.6 Permutations <ol> <li>Evaluate a factorial.</li> <li>Find the number of permutations using the formula.</li> </ol> </li> <li>Section 10.7 Combinations <ol> <li>Identify whether a given situation requires a permutation or a combination.</li> <li>Find the number of combinations using the formula.</li> </ol> </li> <li>Section 10.8 Probability <ol> <li>Find the probability that an event will occur.</li> </ol> </li> </ul>
Week 7	Chapter 10 Statistics and Reality cont. AND Chapter 11: Radicals	Submit Chapter 10 Test.	<ul> <li>Students will be able to</li> <li>Section 10.9 Independent and Dependent Events <ol> <li>Find the probability of dependent events occurring.</li> <li>Find the probability of independent events occurring.</li> </ol> </li> <li>Chapter Review and Test <ul> <li>Section 11.1 Square roots</li> <li>Find the square root of a perfect square.</li> <li>Estimate an irrational square root by determining the two consecutive numbers it lies between.</li> <li>Estimate an irrational square root to the nearest tenth.</li> <li>Evaluate an expression of continuous rational radicals.</li> </ul> </li> <li>Section 11.2 Radical Equations <ul> <li>Solve a radical equation and determine whether the solution is valid.</li> </ul> </li> </ul>

Week 8	Chapter 11: Radicals cont.	Lesson 11.5 "Skill Check 4" pages 473-474.	<ul> <li>Students will be able to.</li> <li>Section 11.3 Equations with Exponents <ol> <li>Solve an equation containing a variable with an exponent.</li> </ol> </li> <li>Section 11.4 the Pythagorean Theorem <ol> <li>Use the Pythagorean theorem to find the unknown side of a right triangle.</li> <li>Use the converse of the Pythagorean theorem to determine whether or not three side lengths form a right triangle.</li> </ol> </li> <li>Section. 11.5 Products and Quotients of Radicals <ol> <li>Simplify a radical by removing perfect square factors.</li> <li>Simplify a product containing radicals.</li> </ol> </li> <li>Section 11.6 Sums and Differences of Radicals. <ol> <li>Add and subtract radical expressions.</li> </ol> </li> </ul>
Week 9	Chapter 11: Radicals cont AND	Submit Chapter 11 Test	<ul> <li>Students will be able to Section 11.7 Cube Roots <ol> <li>Find the cube root of a perfect cube.</li> <li>Estimate an irrational cube root by determining the two consecutive numbers it lies between.</li> <li>Estimate an irrational cube root to the nearest tenth.</li> </ol> </li> <li>Chapter Review and Test</li> </ul>