

**Mathematics Scope and Sequence**  
**Vashon Island High School: Pre-algebra**

<b>First Trimester</b>	<b>Second Trimester</b>	<b>Third Trimester</b>
Algebraic Expressions and Integers (Ch. 1) <ul style="list-style-type: none"> <li>• Variables and expressions</li> <li>• Order of operations</li> <li>• Comparing and ordering Numbers</li> <li>• Adding and subtracting integers</li> <li>• Absolute value</li> <li>• Multiplying and dividing integers</li> <li>• Coordinate plane</li> <li>• Problem solving—look for a pattern</li> </ul> Solving equations (Ch. 2/Ch. 3) <ul style="list-style-type: none"> <li>• Properties of the real numbers</li> <li>• Simplifying variable expressions</li> <li>• Solving one-step equations</li> <li>• Solving inequalities</li> <li>• Problem solving—try, test, revise</li> </ul> Decimal computation (Ch. 3) <ul style="list-style-type: none"> <li>• Rounding and estimating</li> <li>• Solving decimal equations</li> <li>• Using the metric system</li> <li>• Mean, median, mode</li> <li>• Using formulas</li> <li>• Problem solving—simplify the problem</li> </ul> Statistics (Ch. 3) <ul style="list-style-type: none"> <li>• Central tendency (mean, median, mode)</li> </ul> Fractions (Ch. 4) <ul style="list-style-type: none"> <li>• Equivalent fractions</li> <li>• Comparing and ordering fractions</li> <li>• Mixed numbers</li> <li>• Fractions and decimals</li> </ul> Exponents (Ch. 4) <ul style="list-style-type: none"> <li>• Basic properties</li> <li>• Scientific notation</li> </ul> Factors and Multiples (Ch. 4/Ch. 5) <ul style="list-style-type: none"> <li>• GCF</li> <li>• LCM</li> </ul>	Fraction Computation (Ch. 5) <ul style="list-style-type: none"> <li>• Multiplying</li> <li>• Dividing</li> <li>• Adding</li> <li>• Subtracting</li> <li>• Estimating</li> <li>• Applications</li> </ul> Measurement (Ch. 5/Ch. 6) <ul style="list-style-type: none"> <li>• Customary units of length</li> <li>• Customary units of capacity and weight</li> <li>• Computations with customary measures</li> <li>• Computations involving time</li> <li>• Metric units of length</li> <li>• Metric units of mass and capacity</li> <li>• Converting units</li> <li>• Measuring temperature</li> <li>• Problem solving—drawing diagrams</li> </ul> Ratio and Proportion (Ch. 6) <ul style="list-style-type: none"> <li>• Ratio</li> <li>• Rate</li> <li>• Proportions</li> <li>• Scale</li> <li>• Problem solving—using estimation</li> </ul> Probability (Ch. 6) <ul style="list-style-type: none"> <li>• Possible outcomes</li> <li>• Simple probabilities</li> <li>• Odds for/odds against</li> </ul> Percent (Ch. 6) <ul style="list-style-type: none"> <li>• Decimals and percents</li> <li>• Percents as fractions</li> <li>• Fractions as percents</li> <li>• Solving percent problems</li> <li>• Problem solving—supplying missing info.</li> <li>• Applications</li> </ul> Solving Equations (Ch. 7) <ul style="list-style-type: none"> <li>• Two step equations</li> <li>• Multi-step equations</li> <li>• Formulas</li> </ul> Solving Inequalities (Ch. 7)	Linear Functions (Ch. 8) <ul style="list-style-type: none"> <li>• Relations and functions</li> <li>• Slope and y-intercept</li> <li>• Graphing equations with two variables</li> </ul> Data Analysis (Ch. 12) <ul style="list-style-type: none"> <li>• Collecting data</li> <li>• Reading and interpreting data</li> <li>• Frequency tables</li> <li>• Graphs (histograms, trend lines, box and whisker plots, pictographs)</li> </ul> Probability (Ch. 12) <ul style="list-style-type: none"> <li>• Probability and prediction</li> <li>• Independent and dependent events</li> <li>• Samples and Surveys</li> <li>• Simulations</li> </ul> Geometry (Ch. 9) <ul style="list-style-type: none"> <li>• Points, lines, planes</li> <li>• Measuring and drawing angles</li> <li>• Classifying angles</li> <li>• Congruence</li> <li>• Constructing congruent segments and angles</li> <li>• Constructing bisectors</li> <li>• Polygons</li> <li>• Circles</li> <li>• Translations, symmetry, reflections, rotations</li> </ul> Perimeter, Area, and Volume (Ch. 10) <ul style="list-style-type: none"> <li>• Area</li> <li>• Solids</li> <li>• Surface area</li> <li>• Volumes</li> <li>• Applications</li> </ul> Irrational numbers (Ch. 11)           Right Triangles (Ch. 11) <ul style="list-style-type: none"> <li>• Distance Formula</li> <li>• Midpoint Formula</li> <li>• Pythagorean Thm</li> <li>• Special Right Triangles</li> </ul> Nonlinear Functions and Polynomials (Ch. 13) (optional given time constraints)