

<b>DEPARTMENT: MATHEMATICS</b>	<b>COURSE TITLE: NUMBER PATTERNS B</b> <b>COURSE NUMBER: 307</b>
<b>GRADE(S): 9-12</b>	<b>PRE-REQUISITES (IF ANY): NONE</b>

<b>UNIT</b>	<b>LENGTH</b>	<b>CONTENT</b>	<b>SKILLS</b>	<b>METHODS OF ASSESSMENT</b>	<b>FRAMEWORK STRAND(S) &amp; STANDARD(S)</b>
Flowcharts and Order of Operations	3 weeks	<ul style="list-style-type: none"> <li>Order of operations</li> <li>Solving equations using a flowchart</li> <li>Inverse operations</li> <li>Data tables</li> <li>Operations with integers</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate expressions using the order of operations</li> <li>Translate between flowcharts, equations and data tables</li> <li>Solve one variable equations using flowcharts and inverse operations</li> <li>Compute with integers</li> </ul>	<ul style="list-style-type: none"> <li>Notebook</li> <li>Tests</li> <li>Papers</li> <li>Homework</li> <li>In-class projects</li> <li>Portfolio</li> </ul>	8.N.7 8.N.9 8.N.10
Solving Equations	3 weeks	<ul style="list-style-type: none"> <li>Using a variable</li> <li>Properties of equality</li> <li>Simplifying expressions</li> <li>One to one correspondence</li> <li>No solution problems</li> <li>Infinite solution problems</li> </ul>	<ul style="list-style-type: none"> <li>Solve equations in one variable using concrete, informal and formal methods</li> <li>Understand the meaning of a variable in an equation</li> <li>Use the commutative and distributive properties to simplify algebraic expressions</li> </ul>	<ul style="list-style-type: none"> <li>Notebook</li> <li>Tests</li> <li>Papers</li> <li>Homework</li> <li>In-class projects</li> <li>Portfolio</li> </ul>	10.N.2 8.P.6 6.P.3 6.P.5
Patterns and Using a Variable	3 weeks	<ul style="list-style-type: none"> <li>Meaning of variable</li> <li>Patterns</li> <li>Expressing a situation using algebraic notation</li> <li>Differentiating between linear and non-linear data and graphs</li> </ul>	<ul style="list-style-type: none"> <li>Understand and apply the concepts of variable, expression and equation</li> <li>Construct expressions or equations that model problems</li> <li>Translate between tables, verbal rules, equations, diagrams, and graphs</li> </ul>	<ul style="list-style-type: none"> <li>Notebook</li> <li>Tests</li> <li>Papers</li> <li>Homework</li> <li>In-class projects</li> <li>Portfolio</li> </ul>	8.P.1 8.P.2 8.P.4 8.P.6 8.P.10 10.P.1 6.P.7
Fractions and Squaring	3 weeks	<ul style="list-style-type: none"> <li>Square numbers</li> <li>Using diagrams to multiply fractions</li> <li>Addition, subtraction of fractions</li> <li>Multiplication, division of fractions</li> </ul>	<ul style="list-style-type: none"> <li>Use diagrams to understand the meaning of a square number</li> <li>Translate between a diagram of a squared fraction or mixed number and its result</li> <li>Add fractional parts</li> <li>Compute with fractions</li> </ul>	<ul style="list-style-type: none"> <li>Notebook</li> <li>Tests</li> <li>Papers</li> <li>Homework</li> <li>In-class projects</li> <li>Portfolio</li> </ul>	6.N.14