

**Mathematics**  
**Algebra 1: CP**  
**Unit 10: Polynomials and Factoring**

<b>Essential Understandings</b>	<ul style="list-style-type: none"> <li>▪ Knowing about polynomials and how to factor them is an important algebraic skill.</li> </ul>
<b>Essential Questions</b>	<ul style="list-style-type: none"> <li>▪ How do you add and subtract polynomials?</li> <li>▪ How do multiply polynomials?</li> <li>▪ How do you solve quadratic equations in factored form?</li> <li>▪ How do you factor polynomials?</li> </ul>
<b>Essential Knowledge</b>	<ul style="list-style-type: none"> <li>▪ Polynomials can be added and subtracted.</li> <li>▪ Polynomials can be multiplied together.</li> <li>▪ Quadratic equations in factored form can be solved.</li> <li>▪ Factoring polynomials have many steps and procedures.</li> </ul>
<b>Vocabulary</b>	<ul style="list-style-type: none"> <li>▪ <u>Terms:</u> <ul style="list-style-type: none"> <li>○ monomial, binomial, trinomial, degree, factored form, polynomial, zero-product property, factor.</li> </ul> </li> </ul>
<b>Essential Skills</b>	<ul style="list-style-type: none"> <li>▪ Add and subtract polynomials.</li> <li>▪ Multiply polynomials.</li> <li>▪ Solve quadratic equations in factored form.</li> <li>▪ Know the different methods to factor polynomials.</li> </ul>
<b>Related Maine Learning Results</b>	<p><u>Mathematics</u>  A. Number  Real Number  A1.Students will know how to represent and use real numbers.</p> <ol style="list-style-type: none"> <li>a. Use the concept of nth root.</li> <li>b. Estimate the value(s) of roots and use technology to approximate them.</li> <li>c. Compute using laws of exponents.</li> <li>d. Multiply and divide numbers expressed in scientific notation.</li> <li>e. Understand that some quadratic equations do not have real solutions and that there exist other number systems to allow for solutions to these equations.</li> </ol>
<b>Sample Lessons And Activities</b>	<ul style="list-style-type: none"> <li>▪ Students will orally respond to questions.</li> <li>▪ Students will utilize worksheets and in their notes to demonstrate individual understanding of the concepts.</li> </ul>
<b>Sample Classroom Assessment Methods</b>	<ul style="list-style-type: none"> <li>▪ Evaluate homework</li> <li>▪ Quizzes</li> <li>▪ Chapter test</li> </ul>
<b>Sample Resources</b>	<ul style="list-style-type: none"> <li>▪ <u>Publications:</u> <ul style="list-style-type: none"> <li>○ <u>Algebra 1</u> - McDougall Littell</li> </ul> </li> </ul>