

Perform arithmetic operations on polynomials. Focus on polynomial expressions that simplify to forms that are linear or quadratic in a positive integer power of $x$ (Standard A.APR.1)	
<b>Standard A.APR.1:</b> Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.	
Concepts and Skills to Master	
<ul style="list-style-type: none"> <li>• Add, subtract and multiply polynomials.</li> <li>• Understand closure of polynomials for addition, subtraction, and multiplication (for example, extend properties of arithmetic to polynomial arithmetic).</li> </ul>	
Related Standards: Current Course	Related Standards: Future Courses
<a href="#">II.A.SSE.1</a> , <a href="#">II.N.RN.3</a> , <a href="#">II.N.CN.1</a> , <a href="#">II.N.CN.2</a> , <a href="#">II.F.BF.1b</a>	<a href="#">III.N.CN.8</a> , <a href="#">III.A.SSE.1</a> , <a href="#">III.A.APR.2</a> , <a href="#">III.A.APR.3</a> , <a href="#">III.A.APR.4</a> , <a href="#">III.A.APR.5</a> , <a href="#">III.A.APR.6</a> , <a href="#">III.A.APR.7</a> , P.N.CN.3, P.N.CN.5, P.N.CN.10

Support for Teachers

Critical Background Knowledge
<ul style="list-style-type: none"> <li>• Apply properties of operations as strategies to add, subtract (<a href="#">1.OA.3</a>, <a href="#">2.OA.2</a>) and multiply (<a href="#">3.OA.5</a>) using the associative, commutative and distributive properties; extend to rational numbers (<a href="#">7.NS</a>)</li> <li>• Apply properties of operations (to combine terms) and generate equivalent expressions (<a href="#">6.EE.3</a>, <a href="#">I.A.REI.5</a>)</li> <li>• Combine function types using arithmetic operations (<a href="#">I.F.BF.1b</a>)</li> </ul>
Academic Vocabulary
closure
Resources
<a href="https://www.uen.org/core/core.do?courseNum=5620#71472">Curriculum Resources</a> : <a href="https://www.uen.org/core/core.do?courseNum=5620#71472">https://www.uen.org/core/core.do?courseNum=5620#71472</a>