

Domain	Functions and Modeling	
Cluster	Explore expressions, functions, and models to describe numbers or relationships.	
Standard(s)	M.ASHS.16	Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. Instructional Note: Extend to polynomial and rational expressions.

Content Examples

- » *Identifying quadratic patterns*
- » *Factoring using the perfect square pattern*
- » *Factoring using the difference of squares pattern*

Relevant Content

Vocabulary

- » Monomial: an algebraic expression containing a real number, a variable, or a product of a real number and one or more variables with whole number exponents
- » Polynomial: a monomial or the sum or difference of two or more monomials
- » Rational expression: A quotient of two polynomials with a non-zero denominator

Overcoming Obstacles in Factoring

Mastering Factoring

Generating Polynomials from Patterns:

<https://www.map.mathshell.org/lessons.php?unit=9230&collection=8>

Assessment Links or Tasks

Generating Polynomials from Patterns: <https://www.map.mathshell.org/download.php?fleid=1728>