Applied Statistics

Domain	Functions and Modeling	
Cluster	Explore expressions, functions, and models to describe numbers or relationships.	
Standard(s)	M.ASHS.17	Identify zeros of polynomials when suitable factorizations are available and use the zeros to construct a rough graph of the function defined by the polynomial.

Content Examples

» *Zeros of polynomials introduction*

» *Zeros of polynomials: plotting zeros*

» *Zeros of polynomials: matching equation to zeros*

» *Zeros of polynomials: matching equation to graph*

» *Multiplicity of zeros of polynomials*

Relevant Content

Vocabulary

» Zeros (or roots) of a polynomial: The value(s) of x that make a polynomial expression equal to zero

» Factorization: Writing one expression as a product of several factors

» Multiplicity of zero: The amount of times a number is a zero of a polynomial

Graphing Factored Polynomials

Graph polynomial functions, identifying zeros and showing end behavior

Representing Polynomials Graphically:
https://www.map.mathshell.org/lessons.php?unit=9270&collection=8

Assessment Links or Tasks

» Representing Polynomials Graphically: *https://www.map.mathshell.org/download.php?fileid=1744*

» Exploring Polynomials: Factors, Roots, and Zeros:
https://education.ti.com/en/timathnspired/us/detail?id=384FB053735B4C86BBF76AA6E018891C&t=DBC633859A7D466AAF421665A6AE6A91

» Multiplicity of Zeros of Functions:
https://education.ti.com/en/timathnspired/us/detail?id=CE9E5D4823B944B8999336C491E4BC61&t=405EB61A88E7486BAE4F879F4D933A55

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