Applied Statistics

Domain	Functions and Modeling	
Cluster	Explore expressions, functions, and models to describe numbers or relationships.	
Standard(s)	M.ASHS.15	Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiplay complex numbers.

Content Examples

Adding and Subtracting Complex Numbers

Adding complex numbers: Khan Academy

Subtracting complex numbers: Khan Academy

Multiplying complex numbers: Khan Academy

Use mathematical properties to add, subtract, and multiply complex numbers

Relevant Content

» Commutative Property of addition: $a + b = b + a$

» Commutative property of multiplication: $a \times b = b \times a$

» Associative property of addition: $(a + b) + c = a + (b + c)$

» Associative property of multiplication: $(a \times b) \times c = a \times (b \times c)$

» Distributive property: $a \times (b + c) = a \times b + a \times c$

Vocabulary

» Complex number: Any number that can be written in the form $a + bi$, where a and b are real numbers and i is the solution to the equation $x^2 = -1$

Geometrical Connection to Complex Numbers

Assessment Links or Tasks

» Explore and generate rules for operations of complex numbers (TI-Nspire activity): *https://education.ti.com/en/timathnspired/us/detail?id=6FD90593B6FF446CB9BE76C9AF380ECE&sa=291B0ACD31104D178C0EA77ABC7FB53A&t=81A3FC9ACCC24ABAA3BF97F1A038AFA9*

» Complex number bingo: *http://images.pcmac.org/Uploads/JeffersonCountySchools/JeffersonCountySchools/Departments/DocumentsSubCategories/Documents/Math%20-%20Complex%20Numbers%20Bingo%20with%20Answers.pdf*

» Operations with complex numbers: *https://wvde.us/wp-content/uploads/2018/06/Lesson-7-Operations-with-Complex-Numbers.pdf*

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