Learning Targets

Complex Numbers and Rational Exponents

Lesson 1: Properties of Exponents

- I can evaluate expressions with integer exponents.

Lesson 2: Square Roots and Cube Roots

- I can calculate square and cube roots.

Lesson 3: Exponents That Are Unit Fractions

- I can write square and cube roots as exponents.

Lesson 4: Positive Rational Exponents

- I can interpret exponents that are fractions.

Lesson 5: Negative Rational Exponents

- I can interpret exponents that are negative fractions.

Lesson 6: Squares and Square Roots

- I understand that the square root symbol means the positive square root.

Lesson 7: Inequivalent Equations

- I can solve equations by squaring or finding square roots.

Lesson 8: Cubes and Cube Roots

- I can solve equations by cubing or finding cube roots.

Lesson 9: Solving Radical Equations

- I can solve equations with radicals in them.

Lesson 10: A New Kind of Number

- I can represent $\sqrt{-1}$ and multiples of it.

Lesson 11: Introducing the Number i

- I can use i to solve equations.

Lesson 12: Arithmetic with Complex Numbers

- I can add complex numbers and calculate powers of imaginary numbers.

Lesson 13: Multiplying Complex Numbers

- I can multiply complex numbers.

Lesson 14: More Arithmetic with Complex Numbers

- I can do arithmetic with complex numbers.

Lesson 15: Working Backwards

- I can find real and imaginary parts of complex numbers if I know enough about the numbers and their product.

Lesson 16: Solving Quadratics

- I can solve quadratic equations by completing the square or by using the quadratic formula.

Lesson 17: Completing the Square and Complex Solutions

- I can find complex solutions to quadratic equations by completing the square.

Lesson 18: The Quadratic Formula and Complex Solutions

- I can find complex solutions to quadratic equations by using the quadratic formula.

Lesson 19: Real and Non-Real Solutions

- I can find complex solutions to quadratic equations.