Complex Numbers

1 Why

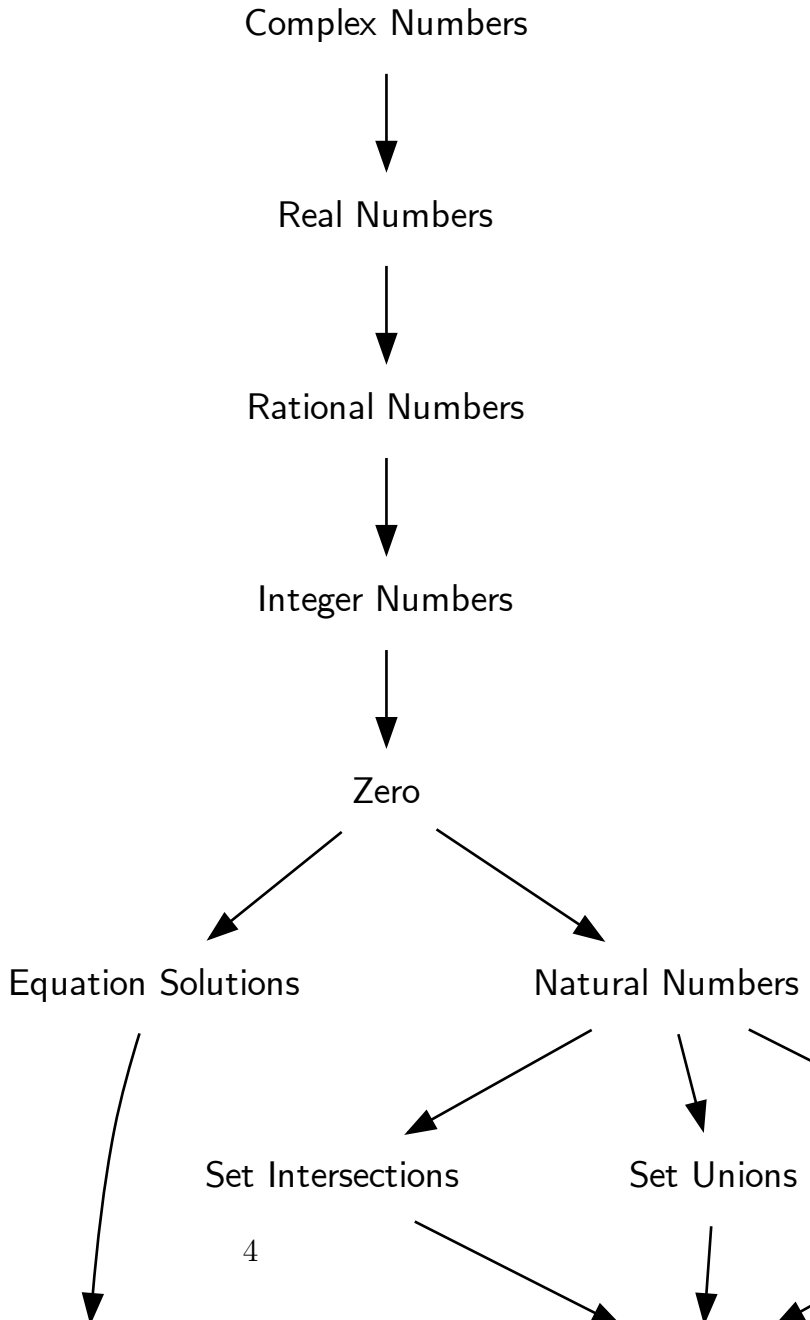
We want to find roots of negative numbers

2 Definition

A *complex number* is an ordered pair of real numbers. The *real part* of a complex number is its first coordinate. The *imaginary part* of a complex number is its second coordinate.

2.1 Notation

Let z be a complex number. We denote the real part of z by $\mathbf{Re}(z)$, read "real of z," and the imaginary part by $\mathbf{Im}(z)$, read "imaginary of z." So if $z = (a, b)$, then $\mathbf{Re}(z) = a$ and $\mathbf{Im}(z) = b$.


Complex Numbers
Real Numbers
Rational Numbers
Integer Numbers
Zero
Equation Solutions
Natural Numbers
Set Intersections
Set Unions