

Real Numbers: Rational and Irrational Numbers.

Irrational Numbers are numbers that can NOT be written as a/b , such as π and $\sqrt{2}$

Rational Numbers Numbers written in the form a/b , when "a" and "b" are integers and $b \neq 0$.

...-2, -1, 0, 1, 2... $1/2$, 0.3, 0.25

*All repeating decimals and all terminating decimals

Integers All positive and negative whole numbers.

...-3, -2, -1, 0, 1, 2, 3, ...

Whole Numbers

0, 1, 2, 3...

All natural numbers AND 0.

Natural Numbers

1, 2, 3, 4, ...

Positive whole numbers starting with 1.

Imaginary or Complex Numbers

Imaginary numbers: the square roots of negative real numbers.

$$\sqrt{-2} = i\sqrt{2}$$

For any positive real number "b", $\sqrt{-b^2} = bi$

Complex Numbers: any number that can be written in the form $a + bi$, where "a" and "b" are real numbers and "i" is the imaginary unit.

"a" is the real part

"b" is the imaginary part.

Example: $5 + 2i$