Classifying Numbers

### REAL NUMBERS

# RATIONAL NUMBERS

include all integers, fractions, and terminating and repeating decimals

## INTEGERS

all whole numbers and their opposites

... -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5 ...

#### WHOLE NUMBERS

all natural numbers and 0

0, 1, 2, 3, 4, 5 ...

### NATURAL NUMBERS

aka counting numbers include all positive whole numbers

1, 2, 3, 4, 5 ...

## IRRATIONAL NUMBERS

any number that cannot be expressed as a fraction

examples are "ugly" square roots and pi



#### IMAGINARY NUMBERS

come from negatives under square roots

have an "i" attached to them

 $\frac{\text{EXAMPLE}}{\sqrt{-25}} = 5i$