



Classifying Numbers

Real Numbers

Rational Numbers

Any number that can be written as a fraction, terminating decimal, or repeating decimal

$$-3, 4, 0, \frac{1}{2}, \frac{-51}{53},$$

$$3.\bar{3}, 6.2\bar{3},$$

$$-818.\bar{18}$$



Integers

$$-2, -1, 0, 1, 2, \dots$$



Whole Numbers

$$0, 1, 2, 3, \dots$$



Natural Numbers

$$1, 2, 3, \dots$$



Irrational Numbers

Any non-repeating non-terminating decimal.

$$\sqrt{2}, -\sqrt{5}, \pi,$$

6.13857...non repeating and non terminating decimal

Imaginary Numbers



$$\sqrt{-6}, \sqrt{-9}, 6+3i$$