

Handout #01

Classifying Real Numbers

Real numbers are classified into the following groups:

- natural numbers: $(1, 2, 3, 4, 5, \dots)$
- whole numbers: $(0, 1, 2, 3, 4, \dots)$
- Integers: $(\dots, -3, -2, -1, 0, 1, 2, 3, \dots)$

note: Integers are numbers on the number line.

- Rational numbers are numbers that can be written as a fraction (ratio)

example: $\frac{2}{3}$, 0 , -5 , $-\frac{1}{5}$, 94

- Irrational numbers are numbers that cannot be written as a fraction (ratio)

example: $\sqrt{2}$, $\sqrt{7}$, π

Note: If you entered an irrational number in a calculator, you would get a decimal that continues indefinitely and has NO repeating pattern.