Rational Numbers:

Fractions of whole numbers: $\frac{1}{2}, \frac{5}{9}, \frac{7}{12}, \ldots$

(Whole numbers = "number of people")

Fractions of integers: $\frac{2}{3}, \frac{-7}{8}, -\frac{9}{31}, \ldots$

(Integers = Whole numbers and their negatives)

Improper fractions: $\frac{7}{2}, -\frac{41}{9}, 2\frac{1}{8}, \frac{300}{200}, \ldots$

(Fractions don't have to be in lowest terms.)

Whole Numbers & Integers: $3, 0, -4, \ldots$

(Anything equals itself over 1, example, $3 = \frac{3}{1}$)

Terminating decimals: $0.5, -4.97, \ldots$

($0.5 = \frac{5}{10}, -4.97 = \frac{-497}{100}$.)

Repeating decimals: $0.333\ldots, \ldots$

($0.333\ldots = \frac{1}{3}$)

Examples of Irrational Numbers:

$\pi\ , \sqrt{2}\ , -\sqrt{17}$