RATIONAL NUMBERS

HANDOUT 1/3

- A rational number is defined as a number that can be expressed in the form of $\frac{p}{q}$, where p and q are integers and q ≠ o

  Ex : $\frac{-1}{9}, \frac{-7}{-8}\ \frac{7}{-4}$ . . . are Rational Numbers

- Positive rational Numbers : If both the numerator and the denominator have the same sign, then the rational numbers are said to be positive rational numbers.

  Ex: $\frac{-8}{-17}$, $\frac{-13}{-11}$, $\frac{9}{5}$ … are positive rational numbers

- Negative Rational Numbers : If both the numerator and the denominator have the different signs, then the rational numbers are said to be negative rational numbers.

  Ex: $\frac{4}{-5}$, $\frac{-9}{10}, \frac{-17}{3}$ . . . are negative rational numbers

- Zero is neither positive nor negative Rational Number

- <u>EQUIVALENT RATIONAL NUMBERS</u>

  By multiplying or dividing the numerator and denominator of a rational number by a same nonzero integer, we obtain another rational number equivalent to the given rational number.

  The rational numbers so obtained are equivalent to given rational number.

  Ex: $\frac{-8}{-7} = \frac{16}{14} = \frac{24}{21} = 1\frac{1}{7}$

- Standard form of a rational number:

  A rational number is said to be in standard form if its denominator is a positive integer and the numerator and the denominator have no common factor.

  Ex : (i) Standard form of $\frac{-64}{88}$ is $\frac{-8}{11}$ (ii) Standard form of $\frac{57}{-76}$ is $\frac{-3}{4}$
