

PERIOD~1

MATHEMATICS

CHAPTER NUMBER :~ 1

CHAPTER NAME :~ NUMBER SYSTEMS

SUB TOPIC :~ INTRODUCTION

CHANGING YOUR TOMORROW

LEARNING OUTCOME:-

Students will learn to

- a) Natural Numbers,
- b) Whole Numbers,
- c) Integers,
- d) Rational Numbers,
- e) Equivalent form of Rational numbers and finding Rational Numbers in between two Rational Numbers

<https://www.youtube.com/watch?v=cZHOYnFpjwU>

“Numbers Are Intellectual Witness That Belong Only To Mankind...”

RATIONAL NUMBERS

The numbers which can be expressed in form of p/q form where p and q are integers and q is not equal to 0.

Example:~ (a) $2/5$
(b) $-5/7$

EQUIVALENT NUMBERS

The rational numbers whose standard forms are equal are called equivalent rational numbers.

Example:~ (a) $\frac{1}{2} = \frac{2}{4} = \frac{5}{10} = \frac{25}{50} = \frac{42}{84}$ and so on.

Rational Numbers Between Two Rational Numbers:

Rational numbers are the numbers which can be expressed in the form of p and q where $q \neq 0$

Example: If 10 rational numbers are to be found between $2/7$ and $5/7$, both the rational numbers are to be multiplied with $10/10$.

Solution:-

$$2/7 \times 10/10 = 20/70.$$

$$5/7 \times 10/10 = 50/70.$$

10 rational numbers between $2/7$ and $5/7$ are $21/70, 22/70, 23/70, 24/70, 25/70, 26/70, 27/70, 28/70, 29/70, 30/70$.

Evaluation:
Exercise 1.1

Q 2. Find six rational numbers between 3 and 4.

Solution:-

$$3 = 24/8$$

$$4 = 32/8$$

Six rational numbers between 3 and 4

$25/8, 26/8, 27/8, 28/8, 29/8, 30/8$.

Homework :

Exercise 1.1

AHA:~

1. Find 100 rational numbers between $-2/3$ and $3/2$.
2. Find 50 rational numbers between $1/5$ and $2/5$.

**THANKING YOU
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