

Class – VIII

Lesson Plan (2023-24)

Subject- Mathematics

Topic: Rational Numbers

KPI 1 Definition :- Improving calculation skill

KPI 4 Definition :- Enhancing application skill while adding and subtracting Rational numbers.

Brief Description of the lesson:

Through this chapter students will be taught the concept of Rational numbers, Properties of rational Numbers with their verification.

Objectives:

I - Specific Objectives

To enable the Students to

S1. Define the Rational numbers (K-Define)

S2. Execute Properties of rational numbers like closure, commutative, and associative property for addition, subtraction, division and multiplication. (A- Execute)

KPI 1 We need to revise concept of basic mathematical operation on rational numbers (K-Recall)

S3. Apply Distributive property over addition and subtraction of rational numbers (Ap-Execute)

KPI 4 We will make students understand to apply signing rule while opening the bracket. (DMAS rule) AP (Execute)

S4. Determine Rational numbers between two given rational number analysis (An-organizing)

II - Behavioral Objectives

B1. Through the practice of these concepts students will develop the analytical and calculation skill (An- Differentiating & organizing)

B2. They will be able to develop problem solving ability in day to day situation (A – Implementation)

Process / Activities

ACT 1. (To introduce the lesson) : Analysis

Students will be asked to arrange the following rational numbers written on coloured strips in ascending and descending order of rational number

Expected Learning Outcomes

Students will be able to

1. Understand and find out the Rational number. (K-Define)
2. Explain Properties of rational numbers like closure, commutative, and associative property for addition, subtraction, division and multiplication (A- Execute)
3. To apply the distributive property over addition and subtraction of rational numbers (A-Implement)
4. Insert the Rational numbers between two given rational number. (An-organizing)
5. Develop the analytical and calculation skill as well as able to develop problem solving ability in day today situation. (A- Execute)

Assessment:

KPI 1 To arrange the rational numbers written on colored strips in ascending & descending order of rational number

	Questions	Typology
A 1	Add the following expression : $\frac{-2}{3} + \frac{5}{7} - \frac{3}{21}$ and $\frac{3}{2} + \frac{2}{3}$	U- Inferring
A 2	Find : $\frac{3}{7} + \binom{-6}{11} + \binom{-8}{21} + \binom{5}{22}$	K- Recognizing
A 3	Using appropriate properties find : $\frac{-2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{1}{6}$	U- Inferring
A 4	Which of the following number is the product of $\frac{6}{13}$ and $\frac{-26}{3}$: a) $\frac{-226}{133}$ (b) $\frac{226}{133}$ (c) 1 (d) -4	U- Explaining
A 5	Which of the following numbers is the decimal form of 1/4: (a) -0.25 (b) 2.5 (c) 0.25 (d) - 2.5	U-Interpreting

Placement of Objectives, Instructional Activities and Assessment

TOPIC / START DATE / ASSESSMENT					
KNOWLEDGE	UNDERSTANDING	APPLICATION	ANALYSIS	SYNTYHSIS	EVALUATION
S 1			S 4		
		S 3			
		B 2	B 1		
Activity					
			ACT 1		
Assessment					
A 2	A 1				
	A 3				
	A 4				
	A 5				