SRI DHARMASTHALA MANJUNATHESHWARA SCHOOL, MANGALURU
GRADE : VIII PRACTICE WORKSHEET
CHAPTER 1: RATIONAL NUMBERS

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1)Name the property of multiplication of rational numbers illustrated by the following statements:

(i) -5/16 × 8/15 = 8/15 × -5/16
(ii) -17/5 ×9 = 9 × -17/5
(iii) 7/4 × (-8/3 + -13/12) = 7/4 × -8/3 + 7/4 × -13/12
(iv) -5/9 × (4/15 × -9/8) = (-5/9 × 4/15) × -9/8
(v) 13/-17 × 1 = 13/-17 = 1 × 13/-17
(vi) -11/16 × 16/-11 = 1
(vii) 2/13 × 0 = 0 = 0 × 2/13
(viii) -3/2 × 5/4 + -3/2 × -7/6 = -3/2 × (5/4 + -7/6)

2) Using suitable rearrangement and find the sum of $\frac{4}{7}+\left(-\frac{4}{9}\right)+\frac{13}{7}+(-\frac{14}{9})$

3) Verify the property x × (y + z) = x × y + x× z of rational numbers by taking

X= $\frac{5}{8}$,Y=$\frac{-4}{6}$ and z=$\frac{-7}{12}$

4)simplify : i) $\frac{3}{5}\times\left(\left(\frac{35}{24}\right)+\left(\frac{10}{3}\right)\right)$

ii)$\frac{2}{5}\times\left(-\frac{3}{7}\right)-\frac{1}{6}\times\frac{3}{2}+\frac{1}{14}\times\frac{3}{5}$

iii) $\frac{-4}{5}\times\frac{3}{7}\times\frac{15}{16}\times-\frac{4}{9}$

iv) $\frac{7}{2}+\frac{3}{5}+\left(-\frac{8}{10}\right)+\frac{15}{4}$

5)Find $\frac{3}{7}+\left(-\frac{6}{11}\right)+\left(-\frac{8}{21}\right)+\left(\frac{5}{22}\right)$ using suitable properties.

6) 5/8 of total number of teachers come by bus, while 1/8 of teachers come by two wheeler. All the other teachers walk to school of which 1/4 walk on their own. If 78 teachers come to school walking on their own, how many teachers taught in that school.

7) Mr. Sharma, the mathematics teacher of class VIII asked four students, of his class to write a rational number. The students write a rational number in such a way that the rational numbers written by two of them are equivalent. The rational number written by the third student is in its simplest form; and

the fourth student writes a rational number whose reciprocal is not defined. Based on the above information answer the following questions.

(i) If student 1 writes the rational number $\frac{-2}{9}$; write a possible equivalent rational number.

(ii) What is the rational number written by fourth student?

(iii) What is the simplest form of the rational number $\frac{-34}{85}$?

8) Raj donated 2/3rd of his salary to an NGO for the education of girls, his wife donated 2/3rd of her salary to the NGO on purchasing food items for the girls. Salary of Raj is Rs.42000 and his wife salary is Rs 24000 educate girls
a) Write the amount donated by Raj.
b) Write the amount donated by Raj's wife.
c) Which property will be used to find total amount of donation by Raj and his wife?

9) A dog buried 3 bones in the backyard. The first bone is buried $-2\frac{1}{2}$ feet, the second bone is buried $-2\frac{2}{6}$ feet and third bone is $-\frac{30}{4}$ feet.

(a) Simplify. $-2\frac{1}{2} \times -2\frac{2}{6} \times -\frac{30}{4}$

(b) How much deeper is third bone buried from the first bone?

10) Raju earns Rs16000/month. He spends $\frac{1}{4}$ of his income on food; $\frac{3}{10}$of the remainder on house rent and $\frac{5}{21}$of the remainder on education of children. (a) How much money is still left with him? (b) On which segment Raju spent maximum money?