Class: VIII **Worksheet: 1** **Subject: Mathematics**

Topic: Rational Numbers

Name:

Instruction: Solve the following question in your mathematics h/w copy. You need to copy the questions also.

1) Fill in the blanks:
   a) Rational numbers are numbers of the form_____ where p, q are integers and q ≠ 0.
   b) Rational numbers are not closed under_____.
   c) _____ is called the additive identity of rational numbers.
   d) Zero has____ reciprocal
   e) ____ is the multiplicative inverse of $3\frac{1}{3}$.
   f) The numbers ____ and _____ are their own reciprocals.
   g) There are _____ rational numbers between any two given rational numbers.
2) Write the additive inverse of
   a) $\frac{2}{-9}$
   b) $\frac{-6}{-5}$
3) Write the multiplicative inverse of
   a) -1
   b) $\frac{13}{-19}$
4) Verify that –(-a)=a is true for a= $\frac{-19}{21}$
5) Find five rational numbers between $\frac{-1}{2}$ and 2.
6) Represent $\frac{-5}{6}, \frac{7}{4}, \frac{9}{-11}$ on the number line
7) Find: $\frac{3}{7} + \frac{(-6)}{11} + \frac{(-8)}{21} + \frac{5}{22}$
8) Using appropriate properties, find:
   a) $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$
   b) $\frac{1}{2} - \frac{1}{6} \times \frac{-2}{3} + \frac{7}{9} \times \frac{-1}{6}$
9) Verify the property: a x (b +c) =a ×b +a× c by taking a=$\frac{-5}{2}$, $b = -2, c = \frac{11}{3}$
10) Arrange in ascending order $\frac{-3}{4}, \frac{5}{-12}, \frac{-9}{16}, \frac{7}{-24}$