WORK SHEET SUBJECT- Maths

Chapter 1- Rational Numbers

CLASS-VIII Date - 18.6.14

Q1. 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) The numbers____ and ____ are their own reciprocals.
- f) _____ is the multiplicative inverse of $3\frac{1}{3}$.
- g) The rational number that is equal to its negative is _____.
- h) There are _____ rational numbers between any two given rational numbers.
- i) Nine times the reciprocal of a number is 3. The number is _____.
- j) $\div \frac{3}{7} = -1$.

Q2. Write the additive inverse of

a)
$$\frac{2}{-9}$$
 b) $\frac{-6}{-5}$

Q3. Write the multiplicative inverse of

a) -1 b)
$$\frac{-13}{19}$$

Q4. Verify that –(-a)=a is true for a =
$$\frac{-19}{21}$$

Q5. Verify the property:
$$ax(b+c) = axb + axc$$
 by taking $a = \frac{-5}{2}$, $b = -2$, $c = \frac{11}{3}$

- Q6. Find five rational numbers between $\frac{-1}{2}$ and 2.
- Q7. Arrange in ascending order $\frac{-3}{4}$, $\frac{5}{-12}$, $\frac{-9}{16}$, $\frac{7}{-24}$
- Q8. Represent $\frac{-5}{6}$, $\frac{7}{4}$, $\frac{9}{-11}$ on the number line.

Q9. Find
$$\frac{3}{7} + (\frac{-6}{11}) + (\frac{-8}{21}) + (\frac{5}{22})$$

Q10. Using appropriate properties, find

i)
$$\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$$

ii)
$$\frac{1}{2} - \frac{1}{6} \times \frac{-2}{3} + \frac{7}{9} \times \frac{-1}{6}$$
