# WORK SHEET <br> SUBJECT- Maths <br> Chapter 1- Rational Numbers 

Q1. Fill in the blanks:
a) Rational numbers are numbers of the form $\qquad$ where $\mathrm{p}, \mathrm{q}$ are integers and $\mathrm{q} \neq 0$.
b) Rational numbers are not closed under $\qquad$ .
c) $\qquad$ is called the additive identity of rational numbers.
d) Zero has $\qquad$ reciprocal.
e) The numbers $\qquad$ and $\qquad$ are their own reciprocals.
f) $\qquad$ is the multiplicative inverse of $3 \frac{1}{3}$.
g) The rational number that is equal to its negative is $\qquad$ .
h) There are $\qquad$ rational numbers between any two given rational numbers.
i) Nine times the reciprocal of a number is 3 . The number is $\qquad$ .
j) $\qquad$ $\div \frac{3}{7}=-1$.

Q2. Write the additive inverse of
a) $\frac{2}{-9}$
b) $\frac{-\xi}{-\xi}$

Q3. Write the multiplicative inverse of
a) -1
b) $\frac{-13}{19}$

Q4. Verify that $-(-\mathrm{a})=\mathrm{a}$ is true for $\mathrm{a}=\frac{-19}{21}$
Q5. Verify the property: $a x(b+c)=a x b+a x c$ 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 $\frac{-3}{4}, \frac{5}{-12}, \frac{-5}{16}, \frac{7}{-24}$
Q8. Represent $\frac{-5}{6}, \frac{7}{4}, \frac{9}{-11}$ on the number line.
Q9. Find $\frac{3}{7}+\left(\frac{-6}{11}\right)+\left(\frac{-8}{21}\right)+\left(\frac{5}{22}\right)$
Q10. Using appropriate properties, find
i) $\frac{2}{5} \times \frac{-3}{7}-\frac{1}{14}-\frac{3}{7} \times \frac{3}{5}$
ii) $\frac{1}{2}-\frac{1}{6} \times \frac{-2}{3}+\frac{7}{9} \times \frac{-1}{6}$

