PUBLIC SCHOOL DARBHANGA

Q1.Using appropriate properties find :

(i)

$$\frac{-2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{5}{2} \times \frac{1}{6}$$

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

Q2. Write the additive inverse of each of the following:

(i) $\quad \frac{2}{8}$

(ii) $\quad \frac{-5}{9}$

(iii) $\quad \frac{-6}{-5}$

(iv) $\quad \frac{2}{-9}$

(v) $\quad \frac{19}{-6}$

Q3. Verify that : -(- X) = X for.

(i) $X = \frac{11}{15}$ (ii) $\frac{-13}{17}$

Q4. Find the multiplicative inverse of the following:

(i)-13

(ii) $\frac{-13}{19}$

(iii) $\frac{1}{5}$

(iv)$- \frac{5}{8} \times \frac{-3}{7}$

(v)-1 x $\frac{-3}{7}$

(vi)   -1

Q5. Name the property under multiplication used in each of the following.

(i) $\frac{-4}{5}$ x 1 = 1 x $\frac{-4}{5}$ = $\frac{-4}{5}$

(ii) – 13/17 x -2/7 = -2/7 x -13/17

(iii) -19 / 29   x   29 /-19 = 1

Q6. Multiply 6/13 by the reciprocal of -7/ 16.

Q7.Tell what property allows you to compute

   1/3 x 6 x 4/3   as   1/3 x 6 x 4/3

Q8. Is 8/9 the multiplicative inverse of - $1\frac{1}{8}$? why or why not ?

Q9.Is 0.3 the multiplicative inverse of $3\frac{1}{3}$? why or why not?

Q10. Write.

      (i) The rational number that does not have a reciprocal.

      (ii) The rational numbers that are equal to their reciprocals.

      (iii)The rational number that is equal to its negative.

Q11.Fill in the blanks.

(i)Zero has_____reciprocal.

(ii)The numbers_____and_____are their own reciprocals

(iii)The reciprocal of – 5 is_____.

(iv)Reciprocal of 1/x , where x ≠ 0 is_____.

(v)The product of two rational numbers is always a_____.

(vi)The reciprocal of a positive rational number is_____.