VIII — Mathematics Assignment No-04-Rational Nos.

Q1. Insert 5 rational numbers between $-\frac{1}{3}$ and $\frac{1}{2}$

Q2 Insert 3 rational numbers between $\frac{1}{6}$ and $\frac{1}{3}$

Q3. Prove that $\frac{2}{3} \times \left(\frac{11}{12} \times \frac{-15}{22}\right) = \left(\frac{2}{3} \times \frac{11}{12}\right) \times \frac{-15}{22}$

Q4. Is $\frac{8}{9}$ the multiplicative inverse of $-1\frac{1}{8}$? Why or Why not.

Q5 Verify $-(x+y) = (-x) + (-y)$ if

$x = \frac{-2}{3}$ and $y = \frac{-5}{7}$

Q6. What should be added to $\frac{19}{27}$ to make it $\frac{-13}{15}$

Q7. Simplify the following

(i) $\left(\frac{-2}{3}\right) + \frac{5}{9} + \left(\frac{-7}{6}\right)$

(ii) $\frac{1}{12} + \left(\frac{-5}{18}\right) + \left(\frac{-7}{24}\right)$

Q8. Verify the property:- $x \times (y \times z) = (x \times y) \times z$ if

$x = \frac{7}{4}$, $y = \frac{-11}{3}$, $z = \frac{1}{2}$

Q9. Verify the property:- $x \times (y+z) = (x \times y) + (x \times z)$

if $x = \frac{-3}{4}$; $y = \frac{5}{2}$; $z = \frac{7}{6}$

Q10. Verify that $(x \div y) \times z \neq x \div (y \times z)$ if

$x = \frac{8}{15}$, $y = \frac{2}{5}$, $z = \frac{4}{10}$

ANSWERS

(Q1) $\frac{-3}{12}, \frac{-2}{12}, \frac{-01}{12}, \frac{0}{12}, \frac{1}{12}$ This is one Ans there may be different other Ans.

(Q2) $\frac{1}{4}, \frac{13}{48}, \frac{7}{24}$

(Q4) not M.I

(Q6) $\frac{-212}{135}$

(Q7) (ii) $\frac{-35}{72}$

Q8