Class-VIII Maths Assignment CH-1 Rational numbers

- 1. Fill in the Blanks
- (i) The reciprocal of negative rational number is ______.
- (ii) If a is reciprocal of b, the b is reciprocal of ______
- 2. By what number should $-\frac{3}{4}$ be multiplied in order to produce $\frac{2}{3}$?
- 3. Divide the sum of $\frac{65}{12}$ and $\frac{12}{7}$ by their difference.
- 4. Find three rational numbers between -2 and 5.
- 5. Find ten rational numbers between $-\frac{2}{\alpha}$ and $\frac{5}{\alpha}$
- 6. Represent $\frac{-3}{4}$ and $\frac{1}{2}$ on same number line.
- 7. Simplify by using property (Suitable)

$$-\frac{5}{4}X(\frac{8}{5}+\frac{16}{5})$$

8. Name the Property.

$$\frac{13}{-17}$$
 X 1= $\frac{13}{-17}$ =1 X $\frac{13}{-17}$

9. Find reciprocal of

(i)
$$\frac{-3}{8}$$
 X $\frac{-7}{13}$

(i)
$$\frac{-3}{8} \times \frac{-7}{13}$$
 (ii) $\frac{3}{4} + \frac{1}{6} - \frac{1}{3}$

10. Simplify:
$$\frac{3}{11} \times -\frac{-5}{6} \times \left(\frac{-22}{9}\right) \times \left(\frac{-9}{5}\right)$$

- 11. By what number should we multiply $\frac{-8}{13}$ so that the product may be 24?
- 12. Verify associative property of addition and associative property of multiplication for

$$-\frac{2}{3}, \frac{5}{4}, \frac{7}{12}$$

- 13. Verify commutative property of addition and commutative property of multiplication of $-\frac{4}{9},\frac{2}{3}$.
- 14. Simplify using appropriate properties.

(i)
$$\frac{8}{9} \times \frac{4}{5} + \frac{5}{6} - \frac{9}{5} \times \frac{8}{9}$$
 (ii) $-\frac{2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{1}{6}$ (iii) $\frac{5}{7} + \frac{2}{11} + \frac{8}{7} + \frac{6}{11}$

(iii)
$$\frac{5}{7} + \frac{2}{11} + \frac{8}{7} + \frac{6}{11}$$

Answers

- 2) $\frac{8}{-9}$ 3) $\frac{599}{311}$
- 4) -1,0,1
- 5) $-\frac{19}{90}$, $-\frac{18}{90}$ any
- 6)
- 7) -6
- 8) '1' is multiplicative Identity
- 9) (i) $\frac{104}{21}$ (ii) $\frac{12}{7}$
- 10) -1
- 11) -39
- 14) (i) $-\frac{1}{18}$ (ii) 2 (iii) $\frac{199}{77}$