SNS academy
a fingerprint school
Sincerity, Nobility and Service

Grade: VIII   **Worksheet-Rational Numbers**

MATHEMATICS

Answer the following:

1. Find the multiplicative inverse of the following :

   (i) $\dfrac{7}{18}$ (ii) $-\dfrac{0}{7}$ (iii) $\dfrac{2}{-5}$ (iv) $\dfrac{0}{7}$

2. Verify: $\left(\dfrac{3}{5} \times \dfrac{12}{13}\right) \times \dfrac{7}{18} = \dfrac{3}{5} \times \left(\dfrac{12}{13} \times \dfrac{7}{8}\right)$

3. Verify : (i) $\dfrac{12}{5} + \dfrac{2}{7} = \dfrac{2}{7} + \dfrac{12}{5}$ (ii) $3 + \dfrac{-7}{12} = \dfrac{-7}{12} + 3$

4. Find the additive inverse of the following :

   (i) $\dfrac{1}{3}$ (ii) $\dfrac{-17}{8}$ (iii) $\dfrac{15}{-4}$

5. **Verify that a + b = b + a** by taking

   (i) a = -7/5, b = 2/7   (ii) a = -1 , b = -2/3

6. **Verify that (a+b)+c.=a+(b+c)** by taking

   (i) a = -2 , b = -2/3 , c = -3/4

   (ii) a = -12, b = -9/11, c = 7/-12

7. **Simplify the following:**

   i) (2/3) + (-4/5) + I + (-2/3) + (-11/5)

   ii)(5/8) + (-8/9) + 0 + (-13/3) + (17/24)

8. **Subtract :** i) (-3/4) from (1/2)   ii) (5/8) from (-3/14)

9. **Find the product of :**   i) 5/9, -2/5   ii) -5, -3/15

10. **Verify the property a x (b x c) = (a x b) x c by taking**

    i) a = (7/5), b = (-9/4), c = (1/2)   ii) a = 1, b = (-13/5), c = (3/5)

11. **Verify the property ax(b+c)=(axb)+(axc) by taking:**

    i) a = (1/3), b = 0, c = (-7/6)   ii) a = -2, b = (9/5), c = (-2/15)