NCERT SOLUTIONS CLASS-8 MATHS
CHAPTER-1 EXERCISE-1.1

1. **Using appropriate properties find the value of** $\frac{-2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{1}{6}$

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

$= \frac{-3}{5}(\frac{2}{3} + \frac{1}{6}) + \frac{5}{2}$

$= \frac{-3}{5}(\frac{4+1}{6}) + \frac{5}{2}$

$= \frac{-3}{5}(\frac{5}{6}) + \frac{5}{2}$

$= \frac{-15}{30} + \frac{5}{2}$

$= \frac{-1}{2} + \frac{5}{2}$

$= \frac{4}{2}$

$=2$

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

2. **Using appropriate properties find the value of** $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{6} \times \frac{3}{2} + \frac{1}{14} \times \frac{2}{5}$

Sol. $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{6} \times \frac{3}{2} + \frac{1}{14} \times \frac{2}{5}$

$= \frac{-2}{5} \times \frac{3}{7} - \frac{1}{2} \times \frac{1}{2} + \frac{1}{7} \times \frac{1}{5}$

$= \frac{-6}{35} - \frac{1}{4} + \frac{1}{35}$

$= \frac{-5}{35} - \frac{1}{4}$

$= \frac{-1}{7} - \frac{1}{4}$

$= \frac{-11}{28}$

$= \frac{2}{5} \times \frac{-3}{7} - \frac{1}{6} \times \frac{3}{2} + \frac{1}{14} \times \frac{2}{5}$

$= \frac{-11}{28}$

3. **Solving the additive inverse of** $\frac{2}{8}$

Sol. Additive inverse of $\frac{2}{8} is \frac{-2}{8}$

4. **Solving the additive inverse of** $\frac{-5}{9}$

Sol. Additive inverse of $\frac{-5}{9} is \frac{5}{9}$

5. **Solving the additive inverse of** $\frac{-6}{-5}$

Sol. $\frac{-6}{-5} \frac{-6}{-5}$

Additive inverse of $\frac{6}{5} is \frac{-6}{5}$

Additive inverse of $\frac{-6}{-5} \frac{-6}{5}$

6. **Solving the additive inverse of $\frac{2}{-9}$**

Sol. Additive inverse of $\frac{2}{-9} is \frac{2}{9}$

7. **Verify that –(-x)=x for $x = \frac{11}{15}$**

Sol. $x = \frac{11}{15}$

$-x = \frac{-11}{15}$ $-(-x) = -(\frac{-11}{15})$

$= \frac{11}{15} = x$

$therefore - (-x) = x$

8. **Verify that –(-x)=x for $x = \frac{-13}{17}$**

Sol. $x = \frac{-13}{17}$

$-x = (-\frac{-13}{17}) = \frac{13}{17}$ $-(-x) = -(\frac{-13}{17})$

$= \frac{-13}{17} = x$

$therefore - (-x) = x$

9. **Solve that multiplicative inverse of -13**

Sol. Given multiplicative inverse -13 is $\frac{-1}{13}$

10. **Solve that multiplicative inverse of $\frac{-13}{19}$**

Sol. Given multiplicative inverse $\frac{-13}{19} is \frac{-19}{13}$

11. **Solve that multiplicative inverse of $\frac{-5}{8} \times \frac{-3}{7}$**

Sol. Given multiplicative inverse $\frac{-5}{8} \times \frac{-3}{7}$ is $\frac{8}{5} \times \frac{7}{3}$ or $\frac{-8}{5} \times \frac{-7}{3}$

12. **What is the multiplicative inverse of -1.**

Sol. The multiplicative inverse of -1 is -1.

13. **Name the property under multiplicative used in each of the following.**

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

(ii) $\frac{-13}{17} \times \frac{-2}{7} = \frac{-2}{7} \times \frac{-13}{17}$

(iii) $\frac{-19}{29} \times \frac{29}{-19} = 1$

Sol. (i) ROLE OF 1

(ii) COMMUTATIVITY

(iii) MULTIPLICATIVE INVERSE

14. **Multiply $\frac{6}{13}$ by the reciprocal of $\frac{-7}{6}$**

Sol. Reciprocal of $\frac{-7}{6}$ is $\frac{6}{-7}$

$therefore \frac{6}{13} \times \frac{6}{-7}$

$= \frac{-36}{91}$

15. **what property allows you to compute $\frac{1}{3} \times (6 \times \frac{4}{3})(\frac{1}{3} \times 6) \times \frac{4}{5}$**

Sol. Associativity

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

Sol.

$-1\frac{1}{8} = \frac{-9}{8}$

$= \frac{8}{9} \times \frac{-9}{8}$

$= -1 \neq 1$

$therefore \frac{8}{9}$ is not the multiplicative inverse of Misplaced &

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

Sol. $3\frac{1}{3} = \frac{10}{3} = 3.3$

Misplaced &

Misplaced &