MONTH : SEPTEMBER

SESSION : 3

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 9

CHAPTER NAME : FRACTION

SUB-TOPIC : SIMPLIFICATION OF FRACTIONS

EXERCISE 9 B Q.NO. 3

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

Enable the students

- **To simplify a fraction**

- **To reduce to their lowest term**

- **To perform 2 operations at one time.**

Example: 1

$$\frac{4}{9} \ + \ \frac{5}{6} \ - \ \frac{2}{3}$$

Arrange the fractions with [+] sign together and then fractions with [–]sign.

$$= \ \frac{4 \times 2 \ + \ 5 \times 3 \ - \ 2 \times 6}{18}$$

$$= \ \frac{8 + \ 15 \ - \ 12}{18}$$

$$= \ \frac{11}{18}$$

3	9 , 6, 3
3	3 , 2 , 1
	1 , 2, 1

L.C.M. = 18

3. Simplify

a. $\dfrac{7}{12} + \dfrac{9}{12} - \dfrac{5}{12}$

$$= \dfrac{7 + 9 - 5}{12} = \dfrac{11}{12}$$

b. $\dfrac{9}{10} - \dfrac{3}{5} + \dfrac{7}{8} = \dfrac{9}{10} + \dfrac{7}{8} - \dfrac{3}{5}$

L.C.M. = 40

$$= \dfrac{9 \times 4 + 7 \times 5 - 3 \times 8}{40}$$

$$= \dfrac{36 + 35 - 24}{40} = \dfrac{71 - 24}{40} = \dfrac{47}{40} = 1\dfrac{7}{40}$$

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c. $\dfrac{5}{12} - \dfrac{2}{3} - \dfrac{1}{2} + 7$

$= \dfrac{5}{12} + \dfrac{7}{1} - \dfrac{2}{3} - \dfrac{1}{2}$

$= \dfrac{5 + 7 \times 12 - 2 \times 4 - 1 \times 6}{12}$ \qquad [L.C.M. = 12]

$= \dfrac{5 + 84 - 8 - 6}{12}$

$= \dfrac{89 - 14}{12} = \dfrac{75}{12} = 6\dfrac{3}{12}$

d $\quad \dfrac{1}{2} \quad + \quad \dfrac{3}{4} \quad - \quad \dfrac{5}{8} \quad - \quad \dfrac{1}{16}$

$= \quad \dfrac{8 \, + \, 3 \times 4 \, - \, 5 \times 2 - 1}{16}$ $\qquad$ [L.C.M. = 16]

$= \quad \dfrac{8 + 12 - 10 - 1}{16}$

$= \quad \dfrac{20 - 11}{16} = \dfrac{9}{16}$

e. $8\dfrac{3}{4} + 7\dfrac{1}{2} - 3\dfrac{1}{4} - 2\dfrac{1}{2}$

$= \dfrac{35}{4} + \dfrac{15}{2} - \dfrac{13}{4} - \dfrac{5}{2}$

$= \dfrac{35 + 15 \times 2 - 13 - 5 \times 2}{4}$ [L.C.M. = 4]

$= \dfrac{35 + 30 - 13 - 10}{4}$

$= \dfrac{65 - 23}{4} = \dfrac{42}{4} = 10\dfrac{2}{4}$

f. $10\dfrac{5}{6}$ - $7\dfrac{2}{3}$ + $8\dfrac{1}{3}$ - $5\dfrac{1}{2}$

$= \dfrac{65}{6} + \dfrac{25}{3} - \dfrac{23}{3} - \dfrac{11}{2}$

$= \dfrac{65 + 25 \times 2 - 23 \times 2 - 11 \times 3}{6}$ [L.C.M. = 6]

$= \dfrac{65 + 50 - 46 - 33}{6}$

$= \dfrac{115 - 79}{6} = \dfrac{36}{6} = 6$

➢ **Complete exercise 9 B Q.No.3 in the notebook.**

THANKING YOU
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