

Hw
3.9.21

Date _____
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2. Subtract the following fractions:

$$6) \quad \frac{16}{27} - \frac{7}{9}$$

Ans- $\frac{(2 \times 16) - (3 \times 7)}{54}$

$$= \frac{32 - 21}{54} = \frac{11}{54}$$

$$\begin{array}{r} 3 \overline{) 27, 18} \\ \underline{3 } \\ 3 \\ \underline{2 } \\ 1, 1 \end{array}$$

$$L.C.M = 54$$

$$8) \quad 13 \frac{7}{9} - 8 \frac{5}{12}$$

Ans- $\frac{124}{9} - \frac{101}{12}$

$$= \frac{(4 \times 124) - (3 \times 101)}{36}$$

$$= \frac{496 - 303}{36} = \frac{193}{36}$$

$$\begin{array}{r} 3 \overline{) 9, 12} \\ \underline{3 } \\ 4 \\ \underline{4 } \\ 1, 1 \end{array}$$

$$L.C.M = 36$$

$$h) 6\frac{3}{17} - 4$$

$$L.C.M = 17$$

$$\text{Ans- } \frac{105}{17} - \frac{4}{1}$$

$$\frac{(1 \times 105) - (17 \times 4)}{17}$$

$$= \frac{105 - 68}{17} = \frac{37}{17}$$

$$i) 30\frac{3}{4} - 25$$

$$L.C.M = 4$$

$$\text{Ans- } \frac{123}{4} - \frac{25}{1}$$

$$\frac{(1 \times 123) - (4 \times 25)}{4}$$

$$= \frac{123 - 100}{4} = \frac{23}{4}$$

$$j) \quad 20 \frac{7}{12} - 15$$

$$L.C.M = 12$$

$$\text{Ans-} \quad \frac{247}{12} - \frac{15}{1}$$

$$= \frac{(1 \times 247) - (12 \times 15)}{12}$$

$$= \frac{247 - 180}{12} = \frac{67}{12}$$

$$h) \quad 12 \frac{7}{8} - 11 \frac{1}{2}$$

$$\text{Ans-} \quad \frac{103}{8} - \frac{23}{2} \quad L.C.M = 8$$

$$(1 \times 103) - (4 \times 23)$$

$$= \frac{(1 \times 103) - (4 \times 23)}{8}$$

$$= \frac{103 - 92}{8} = \frac{11}{8}$$

$$L) 200 \frac{1}{4} - 99$$

$$\text{Ans- } \frac{401}{4} - \frac{99}{1}$$

$$= \frac{(1 \times 401) - (4 \times 99)}{4}$$

$$= \frac{401 - 396}{4} = \frac{5}{4}$$

3. Simplify :

$$Q) 5 \frac{5}{12} - 6 + 8 - 5 \frac{3}{5}$$

$$\text{Ans- } \frac{65}{12} - \frac{6+8}{1} - \frac{28}{5}$$

2	12, 5
2	6, 5
3	3, 5
5	1, 5

$$= \frac{(5 \times 65) - (6 \times 60) + (8 \times 60) - (12 \times 28)}{60}$$

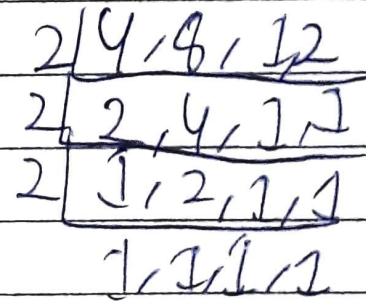
$$L.C.M = 60$$

$$= \frac{325 - 360 + 480 - 336}{60}$$

$$= \frac{325 + 480 - 360 - 336}{60} = \frac{109}{60}$$

b) $20\frac{1}{4} + 6\frac{3}{8} - 15 + 2\frac{1}{2}$

Ans $\frac{41}{4} + \frac{51}{8} - \frac{15}{1} + \frac{2}{2}$



$$= \frac{(2 \times 41) + (1 \times 51) - (8 \times 15) + (3 \times 4)}{8} \text{ L.C.M} = 8$$

$$= \frac{82 + 51 - 120 + 12}{8}$$

$$= \frac{82 + 51 + 12 - 120}{8} = \frac{25}{8}$$

$$i) 25 - 20 \frac{1}{2} + 15 \frac{3}{5} - 5$$

$$\text{Ans- } \frac{25}{1} - \frac{41}{2} + \frac{78}{5} - \frac{5}{1}$$

$2 | 1, 2, 5, 1$
 $5 | 1, 1, 5, 1$
 $1, 1, 1, 1$

$$= \frac{(10 \times 25) - (5 \times 41) + (2 \times 78) - (10 \times 5)}{10} \quad \text{L.C.M} = 10$$

$$= \frac{250 - 205 + 156 - 50}{10}$$

$$= \frac{250 + 156 - 205 - 50}{10} = \frac{151}{10}$$

$$ii) \frac{9}{14} - \frac{9}{7} + \frac{31}{7} - 1 \frac{2}{21}$$

$$\text{Ans- } = \frac{(9 \times 3) - (6 \times 9) + (6 \times 31) - 2 \times 23}{42}$$

$$= \frac{27 - 54 + 186 - 46}{42}$$

$$= \frac{27 + 186 - 54 - 46}{42} = \frac{113}{42}$$