

HW  
23/7/2021

Ex 89(B)

3 Simplify:

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

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

$\frac{65 \times 5 + 8 \times 60 - 6 \times 60 - 28 \times 12}{60} = \frac{(325 + 480) - (3036)}{60}$

$= \frac{805 - 696}{60} = \frac{109}{60} = 1\frac{49}{60}$

h)  $10\frac{1}{4} + 6\frac{3}{8} - 15 + 1\frac{1}{2}$

Ans  $\frac{41}{4} + \frac{51}{8} + \frac{3}{2} - \frac{15}{1}$

$\begin{array}{r} 2 \overline{) 4,8,2} \\ 2 \overline{) 2,4,2} \\ \hline 1,2,2 \end{array}$

$\frac{41 \times 2 + 51 + 3 \times 4 - 15 \times 8}{8}$

$\frac{82 + 51 + 12 - 120}{8} = \frac{145 - 120}{8}$

$$= \frac{25}{8} = 3 \frac{1}{8}$$

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

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

$$\frac{25 \times 10 + 78 \times 2 - 41 \times 5 - 5 \times 10}{10} = \frac{(250 + 156) - (205 + 50)}{10}$$

$$= \frac{406 - 255}{10} = \frac{151}{10} = 15 \frac{1}{10}$$

j)  $\frac{9}{14} - 1 \frac{2}{7} + 4 \frac{3}{7} - 1 \frac{2}{21}$

Ans  $\frac{9}{14} + \frac{31}{7} = \frac{9}{7} - \frac{23}{21}$

7	14, 7, 21
2	2, 1, 1, 3
3	1, 1, 1, 3
	1, 1, 1, 1

$$\frac{9 \times 3 + 31 \times 6 - 9 \times 6 - 23 \times 2}{42}$$

$$= \frac{(27 + 186) - (54 - 46)}{42} = \frac{213 - 100}{42} = \frac{113}{42}$$

$$= 2 \frac{29}{42}$$