6.9.2021

Exercise 9(B)

3. Simplify –

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

$\frac{65}{6} - \frac{23}{3} + \frac{25}{3} - \frac{11}{2}$.

L.C.M of 6, 3, 3, 2 = 6, as 6 is divisible by 3 & 2.

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

$$\frac{65 - 46 + 50 - 33}{6} = \frac{36}{6} = 6$$

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

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

LCM of denominators = 60

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

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

$$\frac{168}{30} = \frac{84}{15} = 5\frac{9}{15}$$

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

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

LCM of denominators = 8.

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

$\frac{82 + 51 - 120 + 12}{8} = \frac{25}{8} = 3\frac{1}{8}$.

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

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

LCM = 2 x 5 = 10.

$\frac{250 - 205 + 156 - 50}{10} = \frac{51}{10} = 5\frac{1}{10}$

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

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

L.C.M of 14, 7, 21 = 42.

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

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