HW
6.9.21

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. = 6

$\frac{65\times1 + 25\times2 - 23\times2 - 11\times3}{6}$

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

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

$= 6$

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

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

L.C.M. = 60

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

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

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

$= 1\frac{49}{60}$

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

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

L.C.M. = 8

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

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

$\frac{145 - 120}{8} = \frac{25}{8}$

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

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

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

L.C.M. = 10

$$\frac{25 \times 10 + 78 \times 2 - 41 \times 5 - 5 \times 10}{10}$$

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

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

$$= 15\frac{1}{10}$$

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

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

L.C.M. = 42

$\frac{9\times3 - 9\times6 + 31\times6 - 23\times2}{42}$

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

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

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