CW
G 9.2)

Exercise - 9<B>

3) a) $\frac{7}{12} + \frac{9}{12} - \frac{5}{12} = \frac{7+9-5}{12} = \frac{11}{12}$

b) $\frac{9}{10} - \frac{3}{5} + \frac{7}{8} = \frac{36-24+35}{40} = \frac{47}{40}$

c) $\frac{5}{12} - \frac{2}{3} - \frac{1}{2} + \frac{7}{1} = \frac{5-8-6+84}{12} = \frac{75}{12}$

87
112
84

d) $\frac{1}{2} + \frac{3}{4} - \frac{5}{8} - \frac{1}{16} = \frac{8+12}{16} = \frac{20}{16}, \frac{10+1}{16} = \frac{11}{16}$

$\frac{20-11}{16} = \frac{9}{16}$

e) $8\frac{3}{4} + 7\frac{1}{2} - 3\frac{1}{4} - 2\frac{1}{2} = \frac{35}{4} + \frac{15}{2} - \frac{13}{4} - \frac{5}{2}$

$= \frac{35+30}{4} = \frac{65}{4}$ $\frac{13+10}{4} = \frac{23}{4}$ $\frac{65-23}{4} = \frac{42}{4}$

f) $10\frac{5}{6} - 7\frac{2}{3} + 8\frac{1}{9} - 5\frac{1}{2} = \frac{65}{6} - \frac{23}{3} + \frac{25}{3} - \frac{11}{2}$

$= \frac{65+50}{6} = \frac{115}{6}$ $\frac{46+33}{6} = \frac{79}{6}$

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

g) $5\frac{5}{12} - \frac{6}{1} + \frac{8}{1} - 5\frac{3}{5} = \frac{65}{12} - \frac{6}{1} + \frac{8}{1} - \frac{28}{5}$

$= \frac{325+480}{60} = \frac{805}{60}$ $\quad \frac{360+336}{60} = \frac{696}{60}$

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

h) $10\frac{1}{4} + 6\frac{3}{8} - \frac{15}{1} + 1\frac{1}{2} = \frac{41}{4} + \frac{51}{8} - \frac{15}{1} + \frac{3}{2}$

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

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

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

i) $\frac{25}{1} - 20\frac{1}{2} + 15\frac{3}{5} - \frac{5}{1} = \frac{25}{1} - \frac{41}{2} + \frac{78}{5} - \frac{5}{1}$

$= \frac{250+156}{10} = \frac{406}{10}$ $\quad \frac{205+50}{10} = \frac{255}{10}$

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

j) $\frac{9}{14} - 1\frac{2}{7} + 4\frac{3}{7} - 1\frac{2}{21} = \frac{9}{14} - \frac{9}{7} + \frac{31}{7} - \frac{23}{21}$

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

$= \frac{113}{42}$