

3.

d) $\frac{1}{2} + \frac{3}{4} - \frac{5}{8} - \frac{1}{16}$ The L.C.M. of 2, 4, 8, and 16 = $2 \times 2 \times 2 \times 2 = 16$

$$\frac{1}{2} + \frac{3}{4} - \frac{5}{8} - \frac{1}{16} = \frac{8}{16} + \frac{12}{16} - \frac{10}{16} - \frac{1}{16}$$

$$= \frac{8 + 12 - 10 - 1}{16} = \frac{9}{8}$$

e) $8\frac{3}{4} + 7\frac{1}{2} - 3\frac{1}{4} - 2\frac{1}{2}$

$$8\frac{3}{4} + 7\frac{1}{2} - 3\frac{1}{4} - 2\frac{1}{2} = \frac{35}{4} - \frac{5}{4} = \frac{30}{4} = \frac{15}{2}$$

The L.C.M. of 4, 7, 42 is = $2 \times 2 \times 2 \times 2 =$

8.

$$\frac{35}{4} \frac{15}{2} \frac{13}{4} \frac{5}{2} = \frac{70+60-26-20-70}{8}$$

$$= 22 \frac{8}{8}$$

F) $10 \frac{5}{6} - 7 \frac{2}{3} + 8 \frac{1}{3} - 5 \frac{1}{2}$

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

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

The L.C.M. of 6, 3, 3, and 2 is

$$3 \times 2 = 6$$

$$\frac{65}{6} - \frac{23}{3} + \frac{25}{3} - \frac{11}{2} = \frac{65 - 46 + 50 - 33}{6}$$

$$= \frac{36}{6} = 6$$

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

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

L.C.M. of 12, 1, 1, 5 is

$$2 \times 5 \times 6 = 60$$

$$\frac{65}{12} - \frac{6}{1} + \frac{8}{1} - \frac{28}{5} = \frac{65 - 72 + 28 - 28}{60}$$

$$= \frac{31}{60}$$

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

$$10\frac{2}{4} + 6\frac{3}{8} - 15 + 1\frac{1}{2} = \frac{41}{4} + \frac{51}{8} - \frac{75}{1} + \frac{3}{2}$$

The L.C.M. of 2, 4, 8 and 1 is $2 \times 2 \times 2$
 $= 8$

$$\frac{111}{4} + \frac{51}{8} - \frac{25}{1} + \frac{3}{2} = \frac{328 + 204 - 304 + 3}{8}$$

$$= \frac{505}{8} = 84 \frac{1}{8}$$

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

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

The L.C.M. of 1, 2, 5, 1 is 2 x 5
 $= 10$

1) $\frac{9}{24} - 1 \frac{2}{7} + 4 \frac{3}{7} - 1 \frac{2}{21}$

$$\frac{9}{24} - 2\frac{3}{7} + 9\frac{3}{7} - 1\frac{2}{21} =$$

$$\frac{9}{24} - \frac{9}{7} + \frac{31}{7} - \frac{12}{21} =$$

The L.C.M. of 24, 7, 7, 21 =

$$2 \times 7 \times 3 = 42$$

$$\frac{9}{24} - \frac{9}{7} + \frac{31}{7} - \frac{12}{21} = \frac{63 - 228 + 357 - 84}{42}$$

$$= \frac{63}{42} = 25\frac{27}{42}$$