

Ex 9 (B)

3. (a) $\frac{7}{12} + \frac{9}{12} - \frac{5}{12}$

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

2	10, 5, 8
5	5, 5, 4
2	1, 1, 4
	1, 1, 2

(b) $\frac{9}{10} - \frac{3}{5} + \frac{7}{8}$

$= \frac{9 \times 4 - 3 \times 8 + 7 \times 8}{40}$

~~$= \frac{36 - 24 + 56}{40}$~~

$= \frac{36 - 24 + 56}{40} = \frac{68}{40}$

~~$\frac{7}{8}$~~

(P)

(c) $\frac{5}{12} - \frac{2}{3} + \frac{1}{2} + 7$

~~$\frac{5 \times 1 + 2 \times 4 + 1 \times 6 + 7 \times 12}{12}$~~

$\frac{5 \times 1 + 2 \times 4 - 1 \times 6 + 7 \times 12}{12}$

$= \frac{5 + 8 - 6 + 84}{12}$

$= \frac{5 + 84 - 6 - 6}{12}$

$= \frac{81 - 8 - 6}{12} =$

$= \frac{81 - 6}{12} = \frac{75}{12} = 6 \frac{3}{12} = 6 \frac{1}{4}$

(d) $\frac{1}{2} + \frac{3}{4} - \frac{5}{8} + \frac{7}{16}$

$= \frac{1 \times 8 + 3 \times 4 - 5 \times 2 + 7 \times 1}{16}$

$$(a) \frac{1}{2} + \frac{3}{4} + \frac{5}{8} + \frac{1}{16}$$

$$= \frac{1 \times 8 + 3 \times 4 + 5 \times 2 + 1 \times 1}{16}$$

$$= \frac{20 + 12 + 10 + 1}{16} = \frac{43}{16}$$

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

$$= \frac{35}{4} + \frac{15}{2} - \frac{13}{4} - \frac{5}{2}$$

$$= \frac{35 \times 1 + 15 \times 2 - 13 \times 1 - 5 \times 2}{4}$$

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

$$= \frac{65 - 13 - 10}{4} = \frac{42}{4} = 10\frac{2}{4} = 10\frac{1}{2}$$

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

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

$$= \frac{65 \times 1 - 23 \times 2 + 25 \times 2 - 11 \times 3}{6}$$

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

$$= \frac{115 - 46 - 33}{6}$$

$$= \frac{69 - 33}{6} = \frac{36}{6} = 6$$

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

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

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

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

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

$$= \frac{805 - 360 - 336}{60}$$

$$= \frac{445 - 336}{60} = \frac{109}{60} = 1 \frac{49}{60}$$

$$(h) 10\frac{3}{7} + 6\frac{3}{8} - 15 + 9\frac{1}{2}$$

$$2) \frac{41}{9} + \frac{51}{8} + \frac{3}{2} - \frac{1}{1}$$

$$2) \frac{41 \times 2 + 51 \times 1 + 3 \times 4 - 1 \times 8}{8} = \frac{82 + 51 + 12 - 8}{8} = \frac{137}{8}$$

$$2) \frac{82 + 51 + 12 - 8}{8} = \frac{137}{8} = 17\frac{1}{8}$$

$$2) \frac{137}{8} - \frac{120}{8} = \frac{17}{8} = 2\frac{1}{8}$$

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

$$2) 25 + \frac{38}{5} - \frac{41}{5} - 5$$

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

$$2) \frac{250 + 156 - 205 - 50}{10} = \frac{51}{10}$$

$$2) \frac{406 - 205 - 50}{10} = \frac{151}{10}$$

$$2) \frac{201 - 50}{10} = \frac{151}{10} = 15\frac{1}{10}$$

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

$$2) \frac{9}{14} + \frac{31}{7} - \frac{9}{7} - \frac{23}{14}$$

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

$$2) \frac{27 + 186 - 54 - 46}{42} = \frac{113}{42}$$

$$2) \frac{213 - 54 - 46}{42} = \frac{113}{42} = 2\frac{29}{42}$$