EXERCISE 12 B

1. $8\frac{3}{5} - (6\frac{1}{2} - 4\frac{1}{4} - 3\frac{3}{4}) = 4\frac{1}{4} - 3\frac{3}{4} = \frac{17-15}{4} = \frac{2}{4}$

$= 6\frac{1}{2} = \frac{13}{2} = \frac{26}{4} - \frac{2}{4} = \frac{24}{4} = 6$ what remains $\frac{43}{5} - \frac{30}{5} = \frac{13}{5}$

$= 2\frac{3}{5}$

2. $17\frac{1}{3} \div \{6\frac{2}{11} - (4 - 2\frac{3}{11} - 1)\} = 2\frac{3}{11} - \frac{25}{11} - \frac{11}{11} = \frac{14}{11}$

$= \frac{47}{11} - \frac{14}{11} = \frac{30}{11} = \frac{68}{11} - \frac{30}{11} = \frac{38}{11}$

$= 17\frac{1}{3} = \frac{52}{3} \div \frac{38}{11} = \frac{52}{3} \times \frac{11}{38} = \frac{572}{114} = 5\frac{18}{57}$

3. $3.2 \div \{1.8 + (3 \div 1.5 + 0.6 - 0.4)\} \times 3$

$= 0.192$ | $\frac{3}{5} = 2 + 0.2 = 2.2$ | $1.8 = 3.96 \times 4$

$3.2 \div 4 = \frac{32}{10} \times \frac{1}{4} = \frac{32}{40} = 0.8$

4) $8\frac{1}{4} + [4\frac{1}{2} + \{8\frac{1}{3} - (6\frac{3}{4} 3\frac{1}{2} - 6\frac{3}{4} - 5\frac{1}{2})\}]$

$= \frac{33}{4} + [\frac{9}{2} + \{\frac{25}{3} - (\frac{7}{2} - \frac{27}{4} - \frac{11}{2})\}]$

$= 27/4 - 22/4 = 5/4$ | $7/2 = 14/4 - 22/4 = 8/4$

$25 = 1/2 = 3/6$ | $25/36 - 3/6 = 47/6$

(5) $5\frac{3}{8} - [3\frac{3}{5} - \{1\frac{1}{8} - (\frac{3}{4} - \frac{1}{2} - \frac{1}{4})$

$= \frac{43}{8} - [\frac{18}{5} - \{\frac{11}{8} - (\frac{3}{4} - \frac{1}{2} - \frac{1}{4})$

$\frac{2}{4} - \frac{1}{4} - \frac{1}{4} = \frac{2}{4}$ | $\frac{11}{8} - \frac{4}{8} = \frac{7}{8}$ | $\frac{18}{5} - \frac{2}{8}$

$= \frac{18 \times 8}{40} = \frac{144}{40} - \frac{3}{40} = \frac{141}{40}$ | $43 \times 5 = 215$ | $\frac{215 - 109}{40} - \frac{106}{40}$

(6) $4 - [5\frac{1}{2} - \{2\frac{1}{2} + (1 + \frac{1}{6} + 1\frac{1}{4} - \frac{1}{12})$

$= 4 - [\frac{43}{8} - \frac{5}{12} + \frac{2}{12} = \frac{29}{12} - \frac{1}{12} = \frac{28}{12} + \frac{30}{12} = \frac{58}{12}$

7) $7.2 + [0.2 \text{ of } 10 - \{0.6 \div 0.3 - 0.8 - 0.6)] = 0.2$

$0.2 - 0.2 = 0$ | $2 - 0 = 2 + 7.2 = 9.2$

(8) $16 \div [0.1 + \{0.1 + (0.1 + 0.2 - 0.1)] = 0.2 - 0.1 = 0.1$

$= 0.2 + 0.1 = 0.3 + 0.1 = 0.4$ | $16 \div 04 = 40$

(9) $8.8 \div [0.5 \text{ of } 15 - \{6.2 \div 2 - (8.4 - 7.6)\}$

$6.2 \div 2 = 31 - 2 = 29 - 21 - 7.5 = 215$

10) $0.4 \div [1.5 \div \{0.6 \div (0.3 - 0.3 - 0.1)\}]$ $0.3 - 0.2 = 0.1$

$0.6 \div 0.1 = 6$ $1.5 \div 1 = 1.5$