Pages 34-35 — Adding and Subtracting Fractions

1) $\frac{5}{9} + \frac{8}{9} - \frac{6}{9} = \frac{5+8-6}{9} = \mathbf{\frac{7}{9}}$
(1 mark)

2) $\frac{2}{11} + \frac{8}{11} = \frac{2+8}{11} = \mathbf{\frac{10}{11}}$ *(1 mark)*

$\frac{17}{20} - \frac{3}{10} = \frac{17}{20} - \frac{6}{20}$
$= \frac{17-6}{20} = \mathbf{\frac{11}{20}}$ *(1 mark)*

3) $\frac{1}{2} + \frac{1}{8} = \frac{4}{8} + \frac{1}{8} = \frac{4+1}{8} = \mathbf{\frac{5}{8}}$
(1 mark)

$\frac{4}{5} - \frac{4}{15} = \frac{12}{15} - \frac{4}{15} = \frac{12-4}{15}$
$= \mathbf{\frac{8}{15}}$ *(1 mark)*

4) E.g. $\frac{9}{10} - \frac{3}{4} = \frac{18}{20} - \frac{15}{20}$
$= \frac{18-15}{20} = \mathbf{\frac{3}{20}}$ *(1 mark)*

5) $\frac{11}{12} + \frac{5}{8} = \frac{22}{24} + \frac{15}{24}$
$= \frac{22+15}{24} = \frac{37}{24} = \mathbf{1\frac{13}{24}}$
(1 mark)

6) E.g. $\frac{1}{8} + \frac{5}{6} = \frac{3}{24} + \frac{20}{24}$

$= \frac{3+20}{24} = \mathbf{\frac{23}{24}}$

(2 marks for the correct answer. Otherwise 1 mark for correct working.)

7) $2\frac{1}{5} - \frac{2}{3} = \frac{11}{5} - \frac{2}{3}$

$= \frac{33}{15} - \frac{10}{15} = \frac{33-10}{15} = \mathbf{\frac{23}{15}}$

(2 marks for the correct answer. Otherwise 1 mark for correct working.)

8) $1\frac{1}{4} + 2\frac{1}{3} = \frac{5}{4} + \frac{7}{3}$

$= \frac{15}{12} + \frac{28}{12} = \frac{15+28}{12} = \frac{43}{12}$

$= \mathbf{3\frac{7}{12}}$

(2 marks for the correct answer. Otherwise 1 mark for correct working.)

Alternatively, you could have added the whole number and fraction parts of the mixed numbers separately, then combined them at the end.

9) $1\frac{7}{10} - \frac{1}{4} = \frac{17}{10} - \frac{1}{4}$

$= \frac{34}{20} - \frac{5}{20} = \frac{34-5}{20}$

$= \frac{29}{20} = \mathbf{1\frac{9}{20}}$

(2 marks for the correct answer. Otherwise 1 mark for correct working.)