

Answer Key — Adding Fractions (Like Denominators)

Year 4 Mathematics · Number and algebra · WA4MNAFR1

Section A — Fluency (16 marks, 1 mark each)

1. $\frac{3}{5}$
2. $\frac{3}{4}$
3. $\frac{5}{8}$
4. $\frac{5}{6}$
5. $\frac{5}{7}$
6. $\frac{5}{9}$
7. $\frac{7}{10}$
8. $\frac{2}{3}$
9. $\frac{9}{11}$
10. $\frac{5}{12}$
11. $\frac{4}{5}$
12. $\frac{5}{8}$
13. $\frac{4}{7}$
14. $\frac{6}{11}$
15. $\frac{7}{9}$
16. $\frac{7}{12}$

Section B — Core (21 marks)

1. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$ cup. [3 marks]
2. (a) $\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$. (b) $1 - \frac{5}{8} = \frac{3}{8}$. [2 marks part (a), 2 marks part (b)]
3. $\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$ of a tin. [3 marks]
4. (a) $\frac{3}{9} + \frac{4}{9} = \frac{7}{9}$. (b) $1 - \frac{7}{9} = \frac{2}{9}$. [2 marks part (a), 2 marks part (b)]
5. $\frac{3}{7} + \frac{2}{7} = \frac{5}{7}$ full. [3 marks]
6. (a) $\frac{2}{10} + \frac{5}{10} = \frac{7}{10}$. (b) $1 - \frac{7}{10} = \frac{3}{10}$. [2 marks part (a), 2 marks part (b)]

Section C — Reasoning (9 marks) — sample responses, award marks for valid reasoning

1. The denominator shows how many equal parts the whole is split into, which doesn't change when combining fractions of the same size, so only the numerators (the number of parts) are added. [2 marks]
2. The student incorrectly added the denominators too; the denominator should stay the same, so the correct answer is $\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$. [2 marks]
3. $\frac{4}{6} + \frac{4}{6} = \frac{8}{6}$, and since 8 is greater than 6, the result is more than one whole — it equals $1\frac{2}{6}$ (or $1\frac{1}{3}$) as a mixed number. [2 marks]
4. False. For example, $\frac{3}{5} + \frac{4}{5} = \frac{7}{5}$, which is greater than 1 (equal to $1\frac{2}{5}$). [3 marks]

Adding Fractions (Like Denominators) · WA4MNAFR1

Section D — Challenge (7 marks)

1. $\frac{8}{9} - \frac{3}{9} = \frac{5}{9}$. [2 marks]
2. Any valid pair that sums to 7, e.g. $\frac{3}{7} + \frac{4}{7}$. [2 marks]
3. Third fraction = $\frac{9}{10} - \frac{2}{10} - \frac{3}{10} = \frac{4}{10}$. Yes, they could all have been equal: $\frac{9}{10} \div 3 = \frac{3}{10}$, and $\frac{3}{10} + \frac{3}{10} + \frac{3}{10} = \frac{9}{10}$. [2 marks third fraction, 1 mark equal-case reasoning]