Homework/Extension
Step 5: Add and Subtract Fractions 1

National Curriculum Objectives:

Mathematics Year 6: (6F2) Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
Mathematics Year 6: (6F4) Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
Mathematics Year 6: (6F11) Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Work out the lowest common denominator to decide who is correct (where denominators are direct multiples of the same number).
Expected Work out the lowest common denominator to decide who is correct (where denominators are not always direct multiples of the same number).
Greater Depth Work out the lowest common denominator to decide who is correct (where denominators are not direct multiples of the same number).

Questions 2, 5 and 8 (Varied Fluency)
Developing Match the calculations to the correct answer using knowledge of adding and subtracting fractions where denominators are direct multiples of the same number.
Expected Match the calculations to the correct answer using knowledge of adding and subtracting fractions where denominators are not always direct multiples of the same number.
Greater Depth Match the calculations to the correct answer using knowledge of adding and subtracting fractions where denominators are not direct multiples of the same number.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Check the calculations and explain whether the statement is correct using knowledge of adding and subtracting fractions where denominators are direct multiples of the same number.
Expected Complete the calculations and explain whether the statement is correct using knowledge of adding and subtracting fractions where denominators are not always direct multiples of the same number.
Greater Depth Complete the calculations and explain whether the statement is correct using knowledge of adding and subtracting fractions where denominators are not direct multiples of the same number.

More Year 6 Fractions resources.

Did you like this resource? Don't forget to review it on our website.

Add and Subtract Fractions 1

1. Charlie and Alice are answering the calculation below.

Charlie

The answer is $\frac{4}{10}$.

No, the answer is $\frac{5}{10}$.

Alice

$$\frac{6}{10} - \frac{1}{5} = \boxed{?}$$

Who is correct?

D

VF
HW/Ext

2. Match the calculations to their correct answers.

A. $\frac{3}{6} + \frac{2}{12}$

B. $\frac{10}{12} - \frac{2}{6}$

C. $\frac{9}{12} - \frac{1}{6}$

$\frac{8}{12}$ $\frac{7}{12}$ $\frac{1}{2}$

D

VF
HW/Ext

3. Dale thinks that calculation A is the odd one out.

A. $\frac{1}{3} + \frac{2}{6} = \frac{2}{3}$

B. $\frac{4}{16} - \frac{1}{8} = \frac{1}{8}$

C. $\frac{4}{5} - \frac{1}{10} = \frac{5}{15}$

D. $\frac{1}{3} + \frac{1}{9} = \frac{4}{9}$

Check the calculations to explain whether Dale is correct.

D

RPS
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Add and Subtract Fractions 1

4. Fred and Ron are answering the calculation below. They give their answer in the simplest form.

Fred

The answer is $\frac{1}{4}$.

No, the answer is $\frac{3}{4}$.

Ron

$$\frac{1}{4} + \frac{3}{6} = \boxed{?}$$

Who is correct?

E

VF
HW/Ext

5. Match the calculations to their correct answers. Answers are shown in their simplest form.

A. $\frac{3}{4} + \frac{1}{8}$

B. $\frac{3}{9} - \frac{1}{4}$

C. $\frac{3}{5} + \frac{1}{7}$

$\frac{1}{12}$ $\frac{7}{8}$ $\frac{26}{35}$

E

VF
HW/Ext

6. Suzie thinks that calculation B is the odd one out.

A. $\frac{4}{9} + \frac{1}{12} = ?$

B. $\frac{3}{4} - \frac{1}{3} = ?$

C. $\frac{2}{6} - \frac{1}{8} = ?$

D. $\frac{1}{5} + \frac{4}{6} = ?$

Complete the calculations to explain whether Suzie is correct.

E

RPS
HW/Ext

Add and Subtract Fractions 1

7. Kelly and Mary are answering the calculation below. They give their answer in the simplest form.

Kelly

The answer is $\frac{1}{2}$.

No, the answer is $\frac{1}{3}$.

Mary

$$\frac{5}{6} - \frac{5}{15} = \boxed{?}$$

Who is correct?

VF
HW/Ext

8. Match the calculations to their correct answers. Answers are shown in their simplest form.

A. $\frac{5}{8} - \frac{3}{14}$

B. $\frac{4}{10} - \frac{1}{6}$

C. $\frac{4}{6} + \frac{1}{8}$

$\frac{19}{24}$ $\frac{7}{30}$ $\frac{23}{56}$

VF
HW/Ext

9. Mike thinks that calculation A is the odd one out.

A. $\frac{5}{15} + \frac{1}{6} = ?$

B. $\frac{5}{9} - \frac{2}{7} = ?$

C. $\frac{2}{8} + \frac{3}{12} = ?$

D. $\frac{1}{6} + \frac{3}{9} = ?$

Complete the calculations to explain whether Mike is correct.

RPS
HW/Ext

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Developing

1. Charlie

2. A = $\frac{8}{12}$ B = $\frac{1}{2}$ C = $\frac{7}{12}$

3. C is the odd one out because it has not been worked out correctly. The numerators and denominators have been added together, the correct answer for C is $\frac{9}{10}$. All the other calculations are correct.

Expected

4. Ron

5. A = $\frac{7}{8}$ B = $\frac{1}{12}$ C = $\frac{26}{35}$

6. A = $\frac{4}{9} + \frac{1}{12} = \frac{38}{72}$ B = $\frac{3}{4} - \frac{1}{3} = \frac{30}{72}$ C = $\frac{2}{6} - \frac{1}{8} = \frac{16}{72}$ D = $\frac{1}{5} + \frac{4}{6} = \frac{26}{30}$

Suzie is incorrect because A, B and C all have a lowest common denominator of 72 whereas D has a lowest common denominator of 30.

Greater Depth

7. Kelly

8. A = $\frac{23}{56}$ B = $\frac{7}{30}$ C = $\frac{19}{24}$

9. A = $\frac{5}{15} + \frac{1}{6} = \frac{1}{2}$ B = $\frac{5}{9} - \frac{2}{7} = \frac{17}{63}$ C = $\frac{2}{8} - \frac{3}{12} = \frac{1}{2}$ D = $\frac{1}{6} + \frac{3}{9} = \frac{1}{2}$

Mike is incorrect because B is the only fraction which is not $\frac{1}{2}$ when written in its simplest form.