Reasoning and Problem Solving
Step 15: Subtract 2 Mixed Numbers

National Curriculum Objectives:

Mathematics Year 5: (5F2a) Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5]
Mathematics Year 5: (5F4) Add and subtract fractions with the same denominator and denominators that are multiples of the same number

Differentiation:

Questions 1, 4 and 7 (Reasoning)
Developing Identify and explain the odd one out from 3 mixed number subtraction calculations where the denominator is double or half of the starting fraction.
Expected Identify and explain the odd one out from 3 mixed number subtraction calculations where the denominators are direct multiples of each other.
Greater Depth Identify and explain the odd one out from 3 mixed number subtraction calculations where the denominators are not direct multiples but share a common factor.

Questions 2, 5 and 8 (Problem Solving)
Developing Use the digit cards to complete the mixed number subtraction calculation where the denominator is double or half of the starting fraction.
Expected Use the digit cards to complete the mixed number subtraction calculation where the denominators are direct multiples of each other.
Greater Depth Use the digit cards to complete the mixed number subtraction calculation where the denominators are not direct multiples but share a common factor.

Questions 3, 6 and 9 (Reasoning)
Developing Explain the mistake made when subtracting 2 mixed numbers where the denominator is double or half of the starting fraction.
Expected Explain the mistake made when subtracting 2 mixed numbers where the denominators are direct multiples of each other.
Greater Depth Explain the mistake made when subtracting 2 mixed numbers where the denominators are not direct multiples but share a common factor.

More Year 5 Fractions resources.

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

Subtract 2 Mixed Numbers

Subtract 2 Mixed Numbers

1a. Circle the odd one out.

A. $3\frac{8}{10} - 2\frac{2}{5}$

B. $4\frac{2}{5} - 3\frac{2}{10}$

C. $2\frac{6}{10} - 1\frac{2}{5}$

Explain your reasoning.

R

1b. Circle the odd one out.

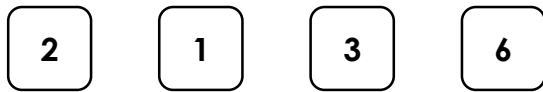A. $4\frac{6}{8} - 2\frac{2}{4}$

B. $5\frac{3}{4} - 3\frac{4}{8}$

C. $3\frac{6}{8} - 1\frac{1}{4}$

Explain your reasoning.

R

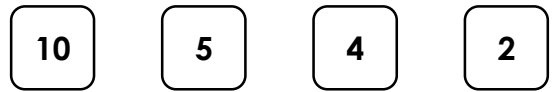**2a.** Use the digit cards to complete the calculation below.

$$\boxed{2} \quad \boxed{1} \quad \boxed{3} \quad \boxed{6}$$

$$5\,\dfrac{\boxed{}}{3} - 1\,\dfrac{2}{\boxed{}} = 4\,\dfrac{\boxed{}}{3}$$

PS

2b. Use the digit cards to complete the calculation below.

$$\boxed{10} \quad \boxed{5} \quad \boxed{4} \quad \boxed{2}$$

$$4\,\dfrac{\boxed{}}{5} - 1\,\dfrac{4}{\boxed{}} = 3\,\dfrac{\boxed{}}{5}$$

PS

3a. Mrs Hill shares the following calculation with Year 5:

$$6\frac{6}{8} - 1\frac{2}{4}$$

Harry says,

> The answer is $5\frac{4}{6}$.

Explain the mistake that he has made.

R

3b. Mr Gregor shares the following calculation with Year 5:

$$7\frac{2}{3} - 2\frac{2}{6}$$

Bella says,

> The answer is $7\frac{1}{3}$.

Explain the mistake that she has made.

R

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Reasoning and Problem Solving – Subtract 2 Mixed Numbers – Year 5 Developing

Subtract 2 Mixed Numbers

4a. Circle the odd one out.

A.　$6\frac{15}{35} - 2\frac{1}{7}$

B.　$9\frac{6}{7} - 5\frac{24}{42}$

C.　$5\frac{20}{28} - 1\frac{2}{7}$

Explain your reasoning.

☆E

R

Subtract 2 Mixed Numbers

4b. Circle the odd one out.

A.　$9\frac{45}{81} - 4\frac{3}{9}$

B.　$8\frac{5}{9} - 3\frac{16}{36}$

C.　$6\frac{30}{45} - 1\frac{4}{9}$

Explain your reasoning.

☆E

R

5a. Use the digit cards to complete the calculation below.

| 28 | 1 | 3 | 21 | 4 |

$$7\,\frac{\square}{4} - \square\,\frac{14}{\square} = 3\,\frac{\square}{4}$$

☆E

PS

5b. Use the digit cards to complete the calculation below.

| 3 | 18 | 15 | 1 | 2 |

$$8\,\frac{\square}{3} - \square\,\frac{5}{\square} = 5\,\frac{\square}{3}$$

☆E

PS

6a. Mrs Johnson shares the following calculation with Year 5:

$$7\frac{5}{6} - 2\frac{16}{24}$$

Lucas says,

> The answer is $7\frac{1}{6}$.

Explain the mistake that he has made.

☆E

R

6b. Mr Brown shares the following calculation with Year 5:

$$4\frac{49}{56} - 1\frac{6}{8}$$

Sumiya says,

> The answer is $3\frac{43}{48}$.

Explain the mistake that she has made.

☆E

R

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Reasoning and Problem Solving – Subtract 2 Mixed Numbers – Year 5 Expected

7a. Circle the odd one out.

A. $7 \frac{21}{28} - 3 \frac{6}{12}$

B. $9 \frac{12}{16} - 5 \frac{18}{36}$

C. $6 \frac{15}{20} - 2 \frac{2}{8}$

Explain your reasoning.

R

7b. Circle the odd one out.

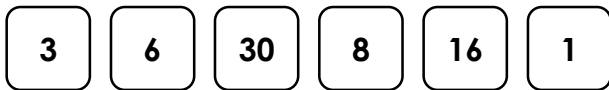A. $8 \frac{12}{15} - 5 \frac{15}{25}$

B. $7 \frac{8}{10} - 4 \frac{22}{55}$

C. $9 \frac{24}{40} - 6 \frac{14}{35}$

Explain your reasoning.

R

8a. Use the digit cards to complete the calculation below.

| 3 | 6 | 30 | 8 | 16 | 1 |

$$8 \frac{\square}{24} - \square \frac{15}{\square} = 5 \frac{\square}{\square}$$

PS

8b. Use the digit cards to complete the calculation below.

| 8 | 56 | 2 | 5 | 1 | 35 |

$$4 \frac{\square}{40} - \square \frac{42}{\square} = 2 \frac{\square}{\square}$$

PS

9a. Mrs Smith shares the following calculation with Year 5:

$$7 \frac{10}{18} - 5 \frac{15}{45}$$

Jack says,

The answer is $7 \frac{2}{9}$.

Explain the mistake that he has made.

R

9b. Mr Gordon shares the following calculation with Year 5:

$$8 \frac{30}{42} - 7 \frac{9}{21}$$

Mia says,

The answer is $1 \frac{21}{21}$.

Explain the mistake that she has made.

R

Reasoning and Problem Solving
Subtract 2 Mixed Numbers

Developing

1a. A is the odd one out because it equals $1\frac{2}{5}$. B and C equal $1\frac{1}{5}$.

2a. 2, 6, 1

3a. Harry has not found the common denominator for the fractions. The correct answer is $5\frac{1}{4}$.

Expected

4a. C is the odd one out because it equals $4\frac{3}{7}$. A and B equal $4\frac{2}{7}$.

5a. 3, 4, 28, 1

6a. Lucas has only subtracted the fraction and not the whole number. The correct answer is $5\frac{1}{6}$.

Greater Depth

7a. C is the odd one out because it equals $4\frac{1}{2}$. A and B equal $4\frac{1}{4}$.

8a. 16, 3, 30, 1, 6

9a. Jack has only subtracted the fraction and not the whole number. The correct answer is $2\frac{2}{9}$.

Reasoning and Problem Solving
Subtract 2 Mixed Numbers

Developing

1b. C is the odd one out because it equals $2\frac{2}{4}$. A and B equal $2\frac{1}{4}$.

2b. 4, 10, 2

3b. Bella has only subtracted the fraction and not the whole number. The correct answer is $5\frac{1}{3}$.

Expected

4b. B is the odd one out because it equals $5\frac{1}{9}$. A and C equal $5\frac{2}{9}$.

5b. 2, 3, 15, 1

6b. Sumiya has not found the common denominator for the fractions. The correct answer is $3\frac{1}{8}$.

Greater Depth

7b. B is the odd one out because it equals $3\frac{2}{5}$. A and C equal $3\frac{1}{5}$.

8b. 35, 2, 56, 1, 8

9b. Mia has not found the common denominator for the fractions. The correct answer is $1\frac{2}{7}$.