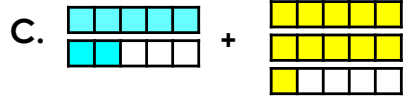
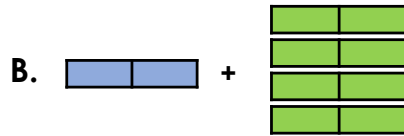


Add Mixed Numbers

1a. Circle the odd one out. Explain why.

A. $2\frac{2}{4} + 4\frac{1}{4}$



D. $3\frac{2}{4} + 1\frac{1}{4}$

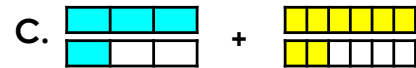
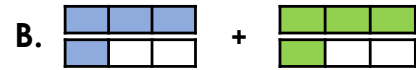


R

Add Mixed Numbers

1b. Circle the odd one out. Explain why.

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



D. $2\frac{1}{3} + 1\frac{1}{3}$



R

2a. Lola has completed the following calculation.

2	$\frac{2}{5}$	+	2	$\frac{2}{5}$	=	4	$\frac{4}{10}$
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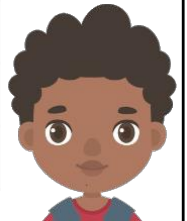
Is she correct?
Explain how you know.



R

2b. Ernie has completed the following calculation.

3	$\frac{2}{10}$	+	3	$\frac{2}{10}$	=	6	$\frac{4}{10}$
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Is he correct?
Explain how you know.



R

3a. I am thinking of a number.
When I add it to the number on the card,
the answer will be a whole number less
than 6.

$3\frac{3}{4}$

The number is a mixed number with a
denominator that is double to that on the
card.

Find 2 possible answers.



PS

3b. I am thinking of a number.
When I add it to the number on the card,
the answer will be a whole number less
than 5.

$2\frac{1}{3}$

The number is a mixed number with a
denominator that is double to that on the
card.

Find 2 possible answers.

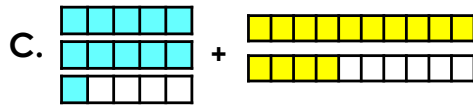


PS

Add Mixed Numbers

4a. Circle the odd one out. Explain why.

A. $1\frac{4}{15} + 3\frac{3}{5}$



D. $2\frac{3}{4} + 2\frac{1}{8}$

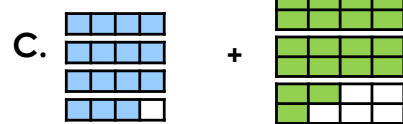
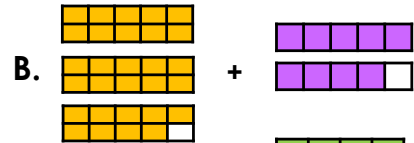


R

Add Mixed Numbers

4b. Circle the odd one out. Explain why.

A. $\frac{7}{3} + 3\frac{1}{6}$



D. $\frac{10}{3} + 2\frac{4}{6}$



R

5a. Libby has completed the following calculation.

$$2\frac{3}{4} + \frac{14}{12} = 3\frac{1}{4}$$



Is she correct?
Explain how you know.



R

5b. Donna has completed the following calculation.

$$4\frac{3}{5} + \frac{19}{10} = 6\frac{1}{2}$$



Is she correct?
Explain how you know.



R

6a. I am thinking of a number.
When I add it to the number on the card
the answer will give the whole number of
10.

$$6\frac{4}{12}$$

The number is either a mixed number or
an improper fraction with a different
denominator.

Find 3 possible answers.



PS

6b. I am thinking of a number.
When I add it to the number on the card
the answer will give the whole number of
12.

$$7\frac{4}{6}$$

The number is either a mixed number or
an improper fraction with a different
denominator.

Find 3 possible answers.



PS

Add Mixed Numbers

Add Mixed Numbers

7a. Circle the odd one out. Explain why.

A. $3\frac{1}{8} + \frac{15}{6}$

B. $2\frac{4}{12} + \frac{24}{9}$

C. $6\frac{3}{10} + \frac{19}{4}$

D. $12\frac{2}{6} + \frac{11}{5}$

7b. Circle the odd one out. Explain why.

A. $2\frac{6}{8} + \frac{24}{10}$

B. $3\frac{2}{5} + \frac{7}{4}$

C. $1\frac{4}{10} + \frac{15}{4}$

D. $3\frac{3}{5} + \frac{14}{8}$



R



R

8a. Annabel has completed the following calculation.

3	$\frac{6}{10}$	+	$\frac{16}{8}$	=	5	$\frac{1}{5}$
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Is she correct?
Explain how you know.

8b. Peter has completed the following calculation.

5	$\frac{3}{5}$	+	$\frac{15}{3}$	=	8	$\frac{3}{5}$
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Is he correct?
Explain how you know.



R



R

9a. I am thinking of a number.
When I add it to the number on the card
the answer will not be a whole number.
It will be greater than 9 but less than 12.

$7\frac{4}{6}$

The number is either a mixed number or
an improper fraction with a different
denominator that is not a multiple of 6.

Find 4 possible answers.

9b. I am thinking of a number.
When I add it to the number on the card
the answer will not be a whole number.
It will be greater than 9 but less than 11.

$8\frac{3}{12}$

The number is either a mixed number or
an improper fraction with a different
denominator that is not a multiple of 12.

Find 4 possible answers.



PS



PS

Reasoning and Problem Solving

Add Mixed Numbers

Developing

- 1a. B is the odd one out as it is the only answer that is equivalent to a whole.
- 2a. No, the correct answer is $4\frac{4}{5}$. She has added the denominators.
- 3a. $1\frac{2}{8}$

Expected

- 4a. C is the odd one out as it is the only answer where the whole is less than 4.
- 5a. No. The correct answer is $3\frac{11}{12}$. $\frac{14}{12}$ is equivalent to $1\frac{2}{12}$ and $2\frac{3}{4}$ is equivalent to $2\frac{9}{12}$ so $2\frac{9}{12} + 1\frac{2}{12} = 3\frac{11}{12}$.
- 6a. Various answers, for example:
 $3\frac{2}{3}$, $\frac{11}{3}$ or $3\frac{4}{6}$

Greater Depth

- 7a. B is the odd one out totalling a whole number. The rest give a mixed number total.
- 8a. No, the correct answer is $5\frac{3}{5}$. $\frac{16}{8}$ is equivalent to 2. $3\frac{6}{10} + 2 = 5\frac{6}{10}$ which is equivalent to $5\frac{3}{5}$.
- 9a. Various answers, for example:
 $\frac{11}{3}$, $3\frac{2}{3}$, $2\frac{6}{9}$, $\frac{6}{2}$

Reasoning and Problem Solving

Add Mixed Numbers

Developing

- 1b. D is the odd one out as it is the only answer where the whole is greater than 2.
- 2b. Yes, $3 + 3 = 6$ and $\frac{2}{10} + \frac{2}{10} = \frac{4}{10}$ so $6 + \frac{4}{10} = 6\frac{4}{10}$.
- 3b. $1\frac{4}{6}$

Expected

- 4b. D is the odd one out, totalling a whole number. All the rest have a total that is a mixed number.
- 5b. Yes. $\frac{19}{10}$ is equivalent to $1\frac{9}{10}$ and $4\frac{3}{5}$ is equivalent to $4\frac{6}{10}$ so $1\frac{9}{10} + 4\frac{6}{10} = 5\frac{15}{10}$ which is equivalent to $6\frac{1}{2}$.
- 6b. Various answers, for example:
 $4\frac{1}{3}$, $\frac{13}{3}$ or $4\frac{4}{12}$

Greater Depth

- 7b. D is the odd one out as it is the only calculation that does not equal $5\frac{3}{20}$.
- 8b. No, the correct answer is $10\frac{3}{5}$. $\frac{15}{3}$ is equivalent to 5. $5\frac{3}{5} + 5 = 10\frac{3}{5}$.
- 9b. Various answers, for example:
 $\frac{23}{10}$, $2\frac{2}{6}$, $\frac{15}{8}$, $\frac{8}{3}$