

Adding and subtracting fractions 1

Practise

- 1) $8/11 + 5/11$
- 2) $2/3 + 5/6$
- 3) $5/6 - 1/3$
- 4) $9/10 + 3/5$
- 5) $6/7 - 1/3$
- 6) $10/11 + 5/7$
- 7) $3/4 + 7/12$
- 8) $4/5 - 3/10$
- 9) $12/15 - 3/5$
- 10) $4/7 + 23/28$

Fluency

- 1) A jug contains some milk. Josh pours $\frac{1}{2}$ of the milk into a glass. He pours $\frac{3}{10}$ of the milk into another glass. What fraction of the milk is left?

- 2) $5 \frac{3}{7} - 2 \frac{3}{5}$

Fill in the missing fractions

- 3) $13/7 + ? = 21/7$
- 4) $18/4 - ? = 7/8$
- 5) $? - 6/6 = 1/6$

Reasoning

- 1) Barry says 'I do not need to do any written calculations to solve $4/8 + 2/4$.' Do you agree? Explain how you know.
- 2) Emily says 'When you add fractions together the answer is actually smaller because when the numerator is a bigger number the piece is actually smaller.' What mistake has Emily made? Explain your answer using a diagram
- 3) Steve doesn't understand why the denominator doesn't change when adding fractions but the numerator does. Can you explain why?

Adding and subtracting fractions 2

Practise

- 1) $9/10 + 3/5$
- 2) $6/7 - 1/3$
- 3) $10/11 + 5/7$
- 4) $3/4 + 7/12$
- 5) $4/5 - 3/10$
- 6) $12/15 - 3/5$
- 7) $4/7 + 23/28$

Fluency

- 1) A jug contains some milk. Josh pours $\frac{1}{2}$ of the milk into a glass. He pours $\frac{3}{10}$ of the milk into another glass. What fraction of the milk is left?

- 2) $5 \frac{3}{7} - 2 \frac{3}{5}$

Fill in the missing fractions

- 3) $13/7 + ? = 21/7$
- 4) $18/4 - ? = 7/8$

Reasoning

- 1) Emily says 'When you add fractions together the answer is actually smaller because when the numerator is a bigger number the piece is actually smaller.' What mistake has Emily made? Explain your answer using a diagram
- 2) Steve doesn't understand why the denominator doesn't change when adding fractions but the numerator does. Can you explain why?

Problem solving

- 1) If the answer to a word problem involving subtracting fractions with different denominators is $14/32$, what could the question be?

- 2) Katie subtracted $3/5$ away from a fraction and her answer was $8/45$. What was the original question?

- 3) Think of three different questions for adding fractions with different denominators where the answer is $\frac{15}{17}$. Could you do it? Why or why not?