Discussion Problems
Step 7: Add and Subtract Fractions

Teaching Note: For Q2, an A3 copy on card and scissors may be necessary.

National Curriculum Objectives:

Mathematics Year 5: (5F4) Add and subtract fractions with the same denominator and denominators that are multiples of the same number
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]

About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More Year 5 Fractions resources.

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

Add and Subtract Fractions

1. Olga is thinking of a calculation using fractions. She has written some clues to help you work it out.

The answer to my calculation is a mixed number.

The mixed number answer uses a different denominator.

One of the fractions has a numerator that is a third of its denominator.

Explore the different calculations that Olga could be thinking of.

DP

2. Cut out the triangles and match the calculations to the answers to complete the puzzle.

$\frac{12}{16} + \frac{8}{16}$

$\frac{15}{18} - \frac{7}{18}$

$\frac{16}{12} - \frac{8}{12}$ $\quad$ $\frac{11}{14} - \frac{5}{14}$ $\quad$ $1\frac{1}{3}$

$\frac{10}{9} - \frac{7}{9}$ $\quad$ $1\frac{1}{4}$ $\quad$ $\frac{5}{12} + \frac{9}{12}$

$\frac{9}{14} + \frac{7}{14}$ $\quad$ $\frac{9}{4}$ $\quad$ $1\frac{1}{2}$

$\frac{11}{7}$ $\quad$ $\frac{3}{1}$

$\frac{12}{15} + \frac{8}{15}$

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

$\frac{7}{3}$ $\quad$ $\frac{7}{8} + \frac{5}{8}$

DP

Add and Subtract Fractions

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The answer to my calculation is a mixed number.

The mixed number answer uses a different denominator.

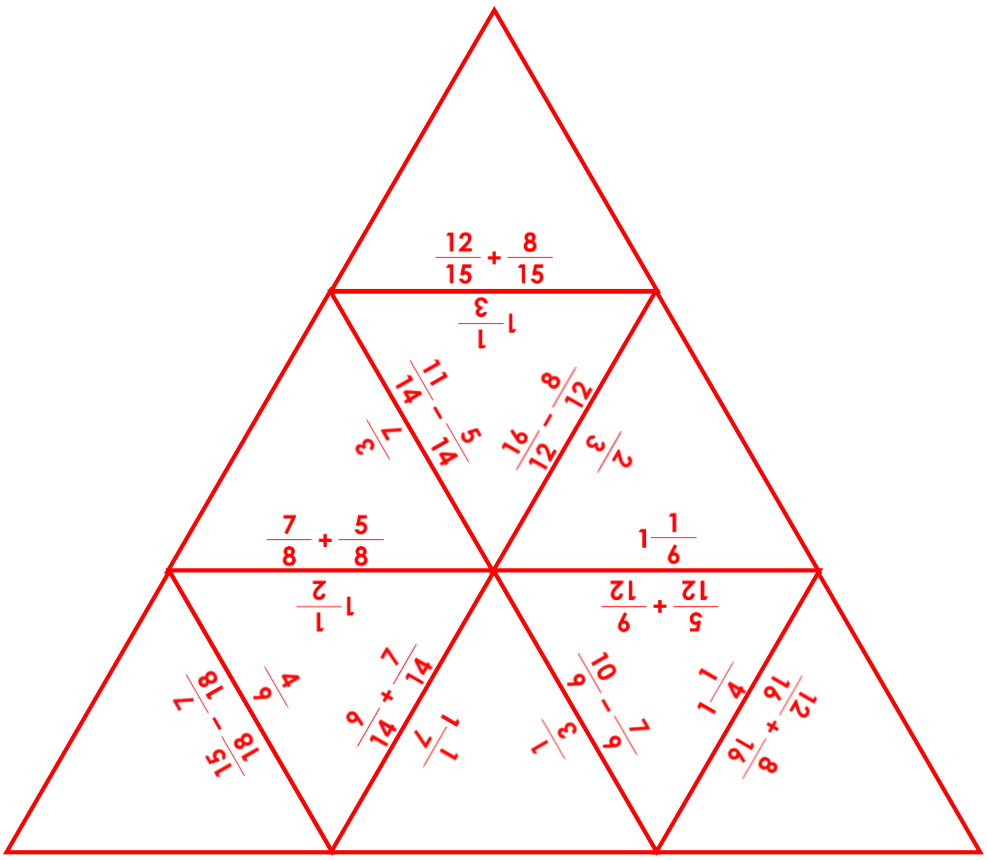
One of the fractions has a numerator that is a third of its denominator.

Explore the different calculations that Olga could be thinking of.

Various answers, for example: $\frac{18}{9} + \frac{3}{9} = \frac{21}{9} = 2\frac{1}{3}$

DP

2. Cut out the triangles and match the calculations to the answers to complete the puzzle.



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