Maths A

Day 1

Can I add fractions?

Adding fractions

Add fractions with the same denominator

Add these fractions. Use the pizzas to help you.

a $\frac{2}{4} + \frac{1}{4}$ b $\frac{3}{5} + \frac{1}{5}$ c $\frac{2}{6} + \frac{3}{6}$

d $\frac{3}{8} + \frac{4}{8}$ e $\frac{5}{7} + \frac{1}{7}$ f $\frac{3}{10} + \frac{5}{10}$

Add these fractions.

a $\frac{3}{7} + \frac{1}{7}$ b $\frac{5}{8} + \frac{2}{8}$ c $\frac{3}{9} + \frac{4}{9}$ d $\frac{2}{10} + \frac{7}{10}$ e $\frac{5}{7} + \frac{2}{7}$

f $\frac{3}{12} + \frac{6}{12}$ g $\frac{6}{10} + \frac{7}{10}$ h $\frac{8}{9} + \frac{4}{9}$ i $\frac{3}{3} + \frac{2}{3}$ j $\frac{8}{12} + \frac{5}{12}$

1 Add these fractions.

a $\frac{11}{14} + \frac{2}{14}$ b $\frac{8}{13} + \frac{5}{13}$ c $\frac{9}{15} + \frac{7}{15}$ d $\frac{12}{100} + \frac{25}{100}$ e $\frac{13}{16} + \frac{5}{16}$

f $\frac{9}{14} + \frac{7}{14}$ g $\frac{5}{17} + \frac{15}{17}$ h $\frac{16}{100} + \frac{30}{100}$ i $\frac{15}{20} + \frac{8}{20}$ j $\frac{10}{18} + \frac{10}{18}$

Day 2

Can I subtract fractions?

Subtracting fractions

Subtract fractions with the same denominator

Challenge 1

Subtract these fractions.

a $\frac{4}{6} - \frac{1}{6}$ b $\frac{6}{7} - \frac{2}{7}$ c $\frac{8}{8} - \frac{5}{8}$ d $\frac{4}{5} - \frac{3}{5}$ e $\frac{7}{9} - \frac{5}{9}$

f $\frac{8}{10} - \frac{6}{10}$ g $\frac{3}{4} - \frac{1}{4}$ h $\frac{6}{8} - \frac{3}{8}$ i $\frac{8}{10} - \frac{7}{10}$ j $\frac{9}{12} - \frac{5}{12}$

Challenge 2

Subtract these fractions.

a $\frac{8}{9} - \frac{3}{9}$ b $\frac{11}{13} - \frac{8}{13}$ c $\frac{9}{10} - \frac{5}{10}$ d $\frac{7}{7} - \frac{5}{7}$ e $\frac{10}{12} - \frac{3}{12}$

f $\frac{9}{6} - \frac{4}{6}$ g $\frac{7}{5} - \frac{3}{5}$ h $\frac{10}{8} - \frac{6}{8}$ i $\frac{16}{15} - \frac{4}{15}$ j $\frac{11}{9} - \frac{10}{9}$

Challenge 3

1 Subtract these fractions.

a $\frac{11}{6} - \frac{4}{6}$ b $\frac{9}{8} - \frac{5}{8}$

c $\frac{15}{13} - \frac{7}{13}$ d $\frac{12}{10} - \frac{8}{10}$

e $\frac{14}{14} - \frac{12}{14}$ f $\frac{18}{10} - \frac{8}{10}$

g $\frac{113}{100} - \frac{20}{100}$ h $\frac{22}{20} - \frac{18}{20}$

Day 3:

Can I write improper fractions as mixed numbers?

2 Write these improper fractions as mixed numbers.

a $\frac{8}{6}$ b $\frac{12}{7}$ c $\frac{13}{9}$ d $\frac{8}{5}$ e $\frac{16}{10}$

f $\frac{14}{12}$ g $\frac{5}{4}$ h $\frac{11}{8}$ i $\frac{17}{11}$ j $\frac{16}{9}$

Example

$\frac{11}{8} = \frac{8}{8} + \frac{3}{8} = 1\frac{3}{8}$

2 Write these improper fractions as mixed numbers.

a $\frac{14}{6}$ b $\frac{13}{5}$ c $\frac{15}{14}$

d $\frac{11}{4}$ e $\frac{26}{10}$ f $\frac{7}{3}$

g $\frac{19}{8}$ h $\frac{9}{4}$ i $\frac{16}{7}$

Example

$\frac{17}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8} = 2\frac{1}{8}$

Day 4

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

Fluency

1) Joanne eats 3/8 of a bunch of grapes; David eats 2/8 of a bunch of grapes. What fraction of the grapes have they eaten altogether?
2) David has 4/7 of a cream cake. Sarah has 1/7 of the same cream cake. What fraction of the cake have they eaten altogether?

Fill in the missing fractions

3) 5/8 + ?/? = 7/8
4) 5/6 - ?/? = 1/6
5) 3/4 - ?/? = 1/4
6) 3/7 + ?/? = 1
7) ?/? - 2/6 = 1/6

Draw diagrams to represent the following problems:

8) 1/4 + 1/4
9) 3/5 + 2/5
10) 5/8 + 2/8
11) 6/10 + 3/10
12) 4/5 + 3/5

Day 5:

Reasoning

1) The answer to a question is 4/9; what is the question?
2) True or false?
   5/12 + 3/12 = 8/12
   5/12 + 3/12 = 8/24
   5/12 + 3/12 = 4/6

Explain your reasoning.

3) Describe the pattern:
   7/10 – 1/10 = 6/10
   6/10 – 1/10 = 5/10

Can you continue the pattern?

Rosie and Whitney are solving:

$$\frac{4}{7} + \frac{2}{7}$$

Rosie says,

The answer is $\frac{6}{7}$
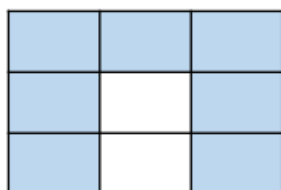
Whitney says,

The answer is $\frac{6}{14}$

Who do you agree with?
Explain why.

How many fraction addition and subtractions can you make from this model?

Mo and Teddy share these chocolates.

They both eat an odd number of chocolates.
Complete this number sentence to show what fraction of the chocolates they each could have eaten.

$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{12}{12}$$

Find the missing fractions:

$$\frac{7}{7} - \frac{3}{7} = \frac{2}{7} + \frac{\square}{7}$$

$$\frac{\square}{9} - \frac{5}{9} = \frac{4}{9} - \frac{2}{9}$$

Jack and Annie are solving $\frac{4}{5} - \frac{2}{5}$

Jack's method:

Annie's method:

They both say the answer is two fifths.
Can you explain how they have found their answers?