

Week 5 of 7

Fractions

Add fractions



Add 2 or more fractions

Subtract fractions



Subtract 2 fractions

Subtract from whole amounts

Mon - Adding Fractions (R)

Tues - Add 2 or more Fractions

Wed - Subtract Fractions (R)

Thurs - Subtract 2 or more Fractions

Fri - Subtract from whole amount

The image features a light blue background. In the center, there is a rectangular area with a light beige background, which is densely populated with various blue-outlined numbers (0-9) of different sizes and orientations. Overlaid on this number-filled area is a solid purple rectangle. Inside the purple rectangle, the word "Monday" is written in a black, cursive script font.

Monday



Monday

IALT: add fractions

Round to the nearest 10

6468

54784

589

7854

Round to the nearest 1000

6468

54784

589

7854



Round to the nearest 100

6468

54784

589

7854

Challenge

Even though you are rounding the same numbers, are you going to get the same answer each time?

<https://www.topmarks.co.uk/maths-games/daily10>

Recap

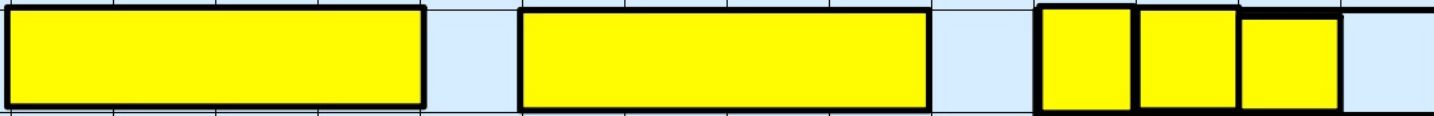
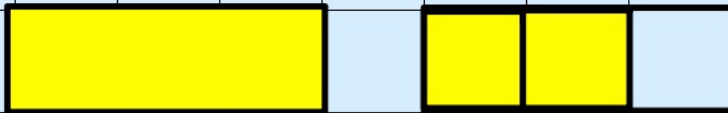
Let's recap our terminology:

Denominator = number of equal parts

Numerator = number of parts that you have

cap

What fraction is shown in each model?



What is the denominator?
What is the numerator?

Today we will be adding fractions.

Do you remember anything about adding fractions from Year 3?

What stays the same? What changes?

Discussion

Have a look at $\frac{3}{4} + \frac{2}{4}$. How could you break this down to work this out?

How can I use my quarters to work out:

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$\frac{1}{4}$$

+

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$\frac{3}{4} + \frac{2}{4}$$

Discussion

Have a look at $\frac{3}{4} + \frac{2}{4}$. How could you break this down to work this out?

How can I use my quarters to work out:

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$+$$

$$\frac{1}{4}$$

$$\frac{1}{4}$$

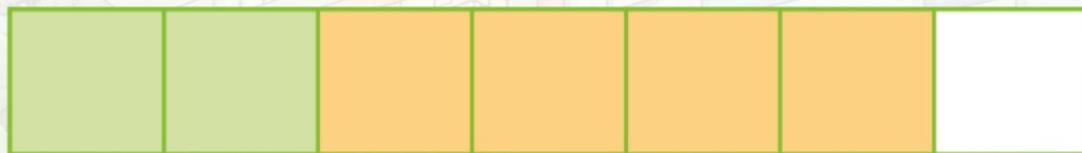
$$\frac{3}{4} + \frac{2}{4}$$

$$= \frac{5}{4}$$

1 whole and $\frac{1}{4}$

or

Use the bar model to work out which two fractions have been added together.



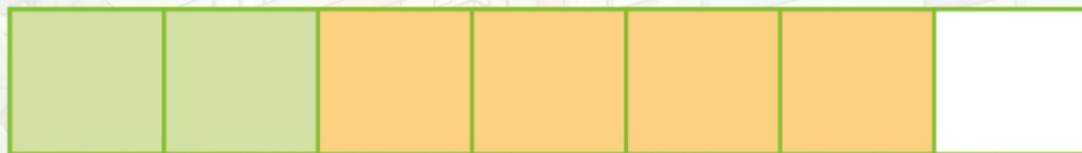
$$\frac{5}{7} + \frac{5}{7}$$

$$\frac{2}{7} + \frac{2}{7} + \frac{4}{7} + \frac{4}{7} + \frac{6}{7}$$

$$\frac{2}{7} + \frac{5}{7}$$

Explain your answer

Use the bar model to work out which two fractions have been added together.



$$\frac{5}{7} + \frac{5}{7}$$

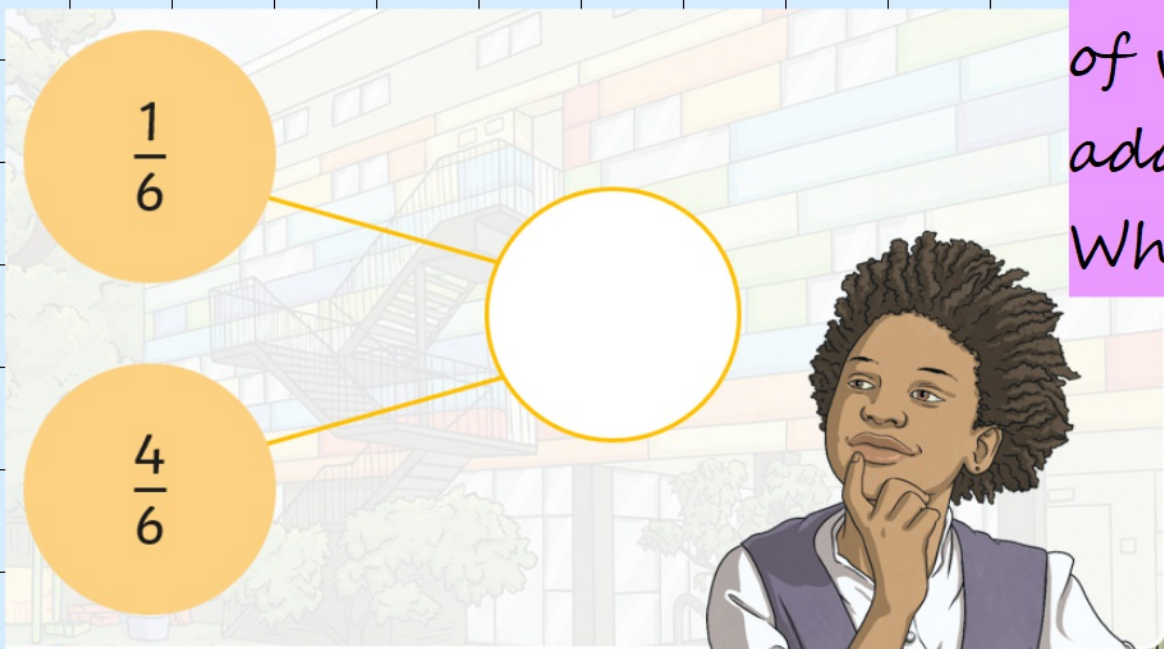
$$\frac{2}{7} + \frac{2}{7} = \frac{4}{7} = \frac{6}{7}$$

$$\frac{2}{7} + \frac{5}{7}$$

$$\frac{2}{7} + \frac{4}{7} = \frac{6}{7}$$

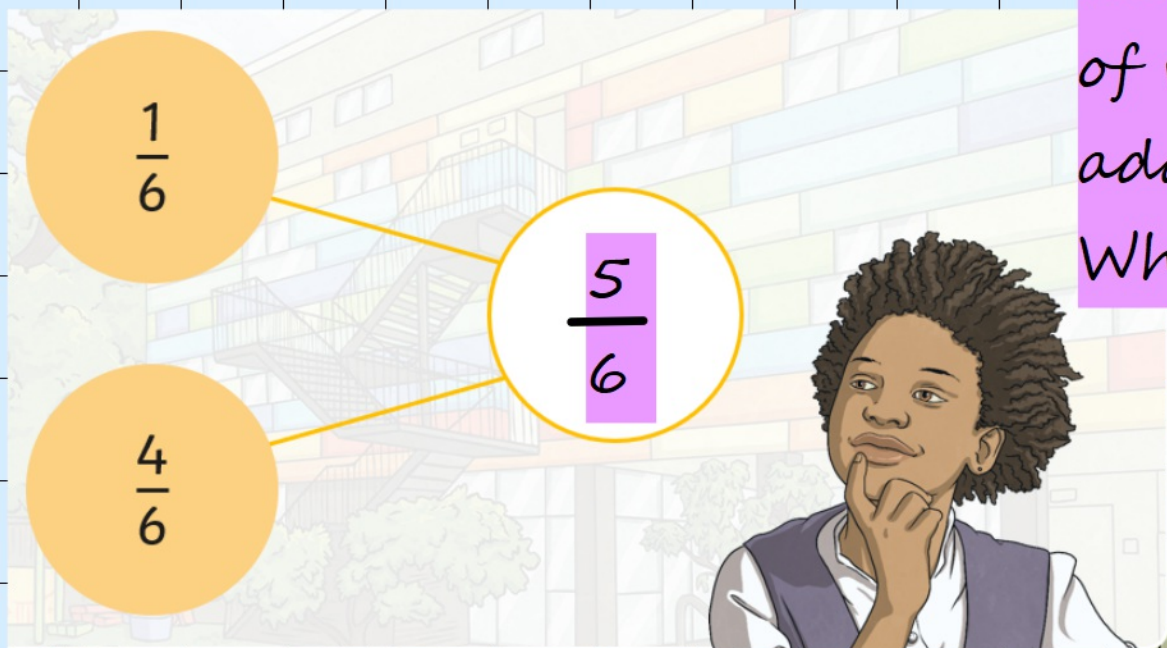
Explain your answer

Here is another way
of working out your
addition problem.
What would the answer be?



Here is another way
of working out your
addition problem.

What would the answer be?



Complete the number sentence.


$$\frac{\quad}{10} + \frac{1}{\quad} + \frac{\quad}{10} = \frac{8}{10}$$

Did we get different answers?

Is that ok?

Explain.

Complete the number sentence.

$$\frac{5}{10} + \frac{1}{10} + \frac{2}{10} = \frac{8}{10}$$

Did we get different answers?

Is that ok?

Explain.



I can add fractions?

your quarters to solve: MILD

$$\frac{3}{4} + \frac{1}{4}$$

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

$$\frac{6}{4} + \frac{1}{4}$$

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

Make some eighths to solve: SPICY

$$\frac{4}{8} + \frac{3}{8}$$

$$\frac{6}{8} + \frac{3}{8}$$

$$\frac{2}{8} + \frac{3}{8}$$

HOT HOT HOT

$$\frac{6}{4} + \frac{\quad}{4} = \frac{9}{4}$$

$$\frac{2}{4} + \frac{\quad}{4} = \frac{8}{4}$$

$$\frac{\quad}{4} + \frac{\quad}{4} = \frac{10}{4}$$

$$\frac{\quad}{4} + \frac{\quad}{4} = \frac{8}{4}$$



I can add fractions?

HOT HOT HOT

your quarters to solve: MILD

$$\frac{3}{4} + \frac{1}{4}$$

$$\frac{4}{4}$$

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

$$\frac{9}{4}$$

$$\frac{6}{4} + \frac{3}{4} = \frac{9}{4}$$

$$\frac{2}{4} + \frac{6}{4} = \frac{8}{4}$$

$$\frac{5}{4} + \frac{5}{4} = \frac{10}{4}$$

$$\frac{4}{4} + \frac{4}{4} = \frac{8}{4}$$

Make some eighths to solve: SPICY

$$\frac{6}{4} + \frac{1}{4}$$

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

$$\frac{4}{8} + \frac{3}{8}$$

$$\frac{7}{8}$$

$$\frac{6}{8} + \frac{3}{8}$$

$$\frac{9}{8}$$

$$\frac{2}{8} + \frac{3}{8}$$

$$\frac{5}{8}$$

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

$$\frac{4}{4}$$

Extension:

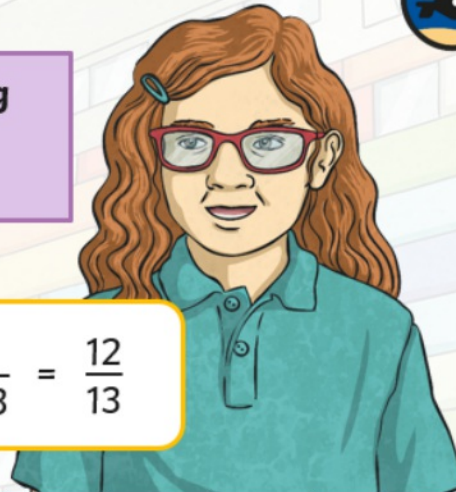
Add Fractions

Deepest

Lucille says it is impossible for both missing numerators to be odd numbers.

Is Lucille correct? Explain with reasoning.

$$\frac{5}{\quad} + \frac{\quad}{13} + \frac{1}{\quad} + \frac{\quad}{13} = \frac{12}{13}$$



Extension:

Add Fractions

Deepest



Lucille says it is impossible for both missing numerators to be odd numbers.

Is Lucille correct? Explain with reasoning.

$$\frac{5}{\quad} + \frac{\quad}{13} + \frac{1}{\quad} + \frac{\quad}{13} = \frac{12}{13}$$

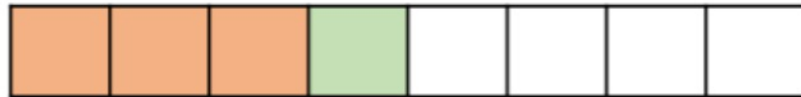
Lucille is incorrect. The missing numerators need to equal 6.

$$\frac{5}{13} + \frac{1}{13} + \frac{1}{13} + \frac{5}{13} = \frac{12}{13}$$

Both 1 and 5 are odd.

Did you get find any other examples?

Mild



We can use this model to calculate $\frac{3}{8} + \frac{1}{8} = \frac{4}{8}$

Draw your own models to calculate

$$\frac{1}{5} + \frac{2}{5} = \frac{\square}{5}$$

$$\frac{2}{7} + \frac{3}{7} + \frac{1}{7} = \frac{\square}{\square}$$

$$\frac{7}{10} + \frac{\square}{\square} = \frac{9}{10}$$

Spicy

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.

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