04.01.22
How do you subtract fractions?

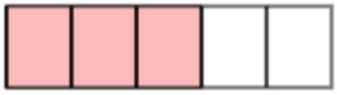
1 Circle all the square numbers.

1 2 10 49 144

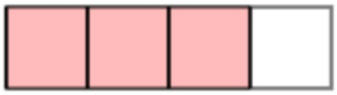
What is a:
fraction
denominator
numerator
proper fraction
improper fraction
mixed fraction

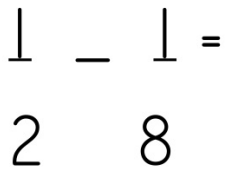
What other words mean to subtract?

$\frac{3}{5} - \frac{1}{5} =$



$$\frac{3}{4} - \frac{1}{4} =$$





$$\frac{2}{4} - \frac{1}{12} =$$

$$\frac{6}{7} - \frac{3}{21} =$$

Try

$\frac{3}{4} - \frac{5}{8} =$

Task

7 _ 1 =

12 3

15 - 3 =

16 4

14 _ 2 =

15 5

8 _ 1 =

9 3

3 _ 1 =

4 2

5 _ 1 =

8 4

5 _ 3 =

6 12

3 _ 1 =

12 24

Extension

The answer is one third. What could the question be?

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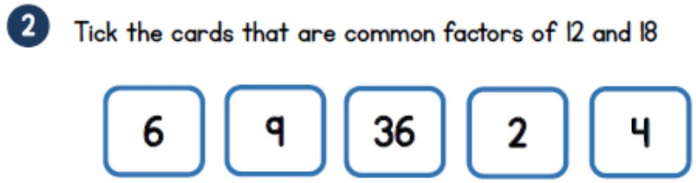
Can you subtract fractions?



What is a:
fraction
denominator
numerator
proper fraction
improper fraction
mixed fraction

How many ways?

Fill in the missing numbers:

$$\frac{6}{7} - \frac{\square}{7} = \frac{\square}{7} + \frac{2}{7}$$

Level 1: I can find a way

Level 2: I can find different ways

Level 3: I know how many ways there are

$$\frac{2}{5} - \frac{1}{4} =$$

$\frac{5}{8} - \frac{1}{3} =$

$$\frac{5}{6} - \frac{3}{4} =$$

Task

7 _ 5 =
8 12

3 _ 2 =
4 3

9 _ 1 =
10 4

3 - 2 =
4 12

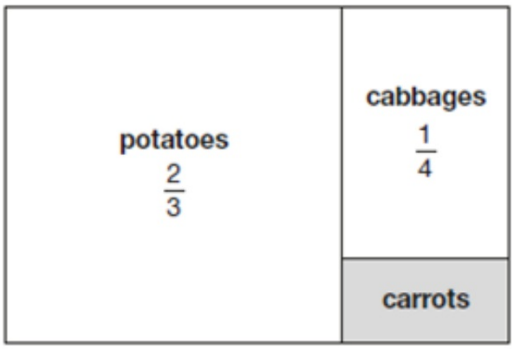
4 _ 3 =
5 15

5 _ 1 =
9 3

Plenary

This is a diagram of a vegetable garden.

It shows the fractions of the garden planted with potatoes and cabbages.



Not to scale

The remaining area is planted with carrots.

What **fraction** of the garden is planted with carrots?

06.01.22

Can you subtract a proper fraction from a mixed fraction?

3 Use the fact 12 ÷ 4 = 3 to complete the missing numbers.

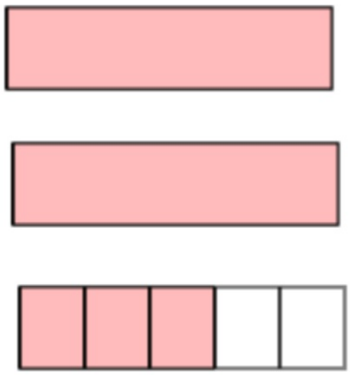
120 ÷ 4 = ☐

124 ÷ 4 = ☐

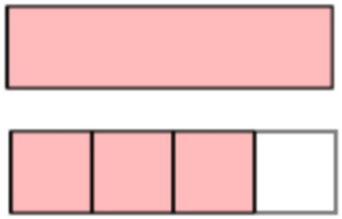
☐ ÷ 4 = 0.3

mixed fraction
proper fraction
improper fraction
denominator
numerator
fraction

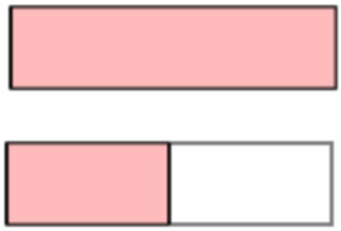
$$2\frac{3}{5} - \frac{3}{10}$$



$$1 \frac{3}{4} - \frac{5}{8} =$$



$$1 \frac{1}{2} - \frac{1}{6} =$$



Try. Draw bar models to show working out.

$1\frac{5}{6} - \frac{7}{12} =$

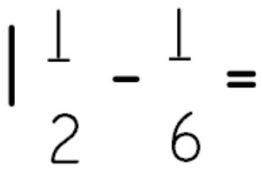
$1\frac{2}{5} - \frac{3}{10} =$

$$2\frac{3}{5} - \frac{3}{10}$$

1, Convert so denominators are the same

2, Mark start fraction on the number line and then count back.

$$\left|\frac{3}{4} \div \frac{5}{8}\right| =$$



Try Convert so denominators are the same. Then draw a numberline and count back.

$1\frac{5}{6} - \frac{7}{12} =$

$1\frac{2}{5} - \frac{3}{10} =$

Work out using both methods

$3\frac{5}{6} - \frac{1}{12} =$

$1\frac{2}{3} - \frac{1}{6} =$

$5\frac{5}{7} - \frac{4}{14} =$

$2\frac{1}{2} - \frac{1}{4} =$

Which method do you prefer? Why?

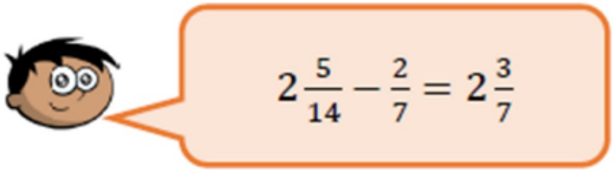
$2\frac{7}{9} - \frac{11}{18} =$

$2\frac{3}{4} - \frac{3}{8} =$

Plenary

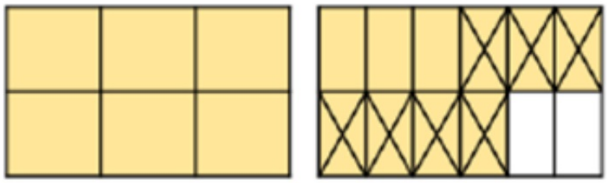
Amir is attempting to solve $2\frac{5}{14} - \frac{2}{7}$

Here is his working out:



Do you agree with Amir?
Explain your answer.

Here is Rosie's method.
What is the calculation?



Can you find more than one answer?
Why is there more than one answer?

07.01.22

Can you subtract a mixed number?

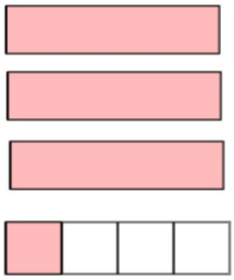
mixed fraction
proper fraction
improper fraction
denominator
numerator
fraction

$3\frac{1}{4} - 1\frac{3}{4} =$

Look at the fractions.
What do you notice?

Change mixed fractions into improper fractions

$3\frac{1}{4}$



$1\frac{3}{4}$

$$3\frac{1}{8} - \frac{3}{8} =$$

$$3\frac{1}{8} - 1\frac{1}{2} =$$

Try these by changing to improper fractions.

$$2\frac{1}{8} - 1\frac{3}{4} =$$

$$2\frac{3}{12} - 1\frac{5}{6} =$$

This time we are going to use exchanging to subtract.

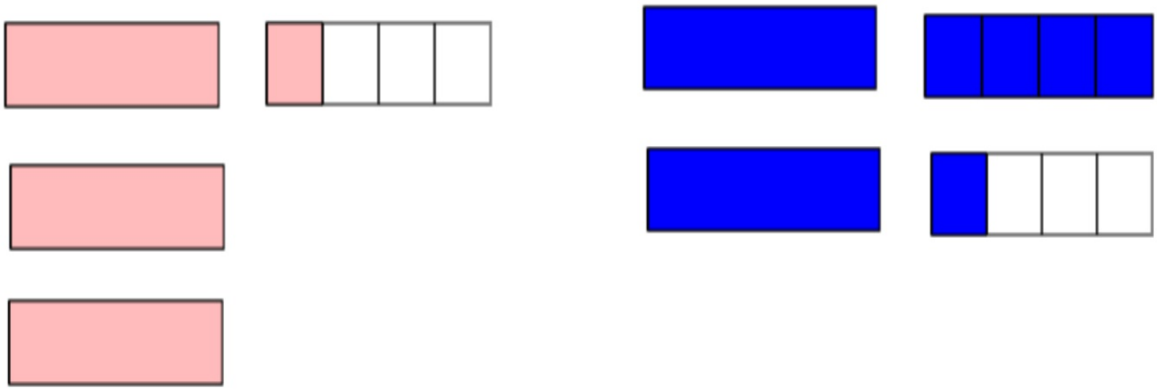
$$3\frac{1}{4} - 1\frac{3}{4} =$$

Look at the start fraction.

We are going to exchange a whole.

$$1 = \frac{?}{4} \qquad 3\frac{1}{4} = 2\frac{?}{4}$$

$3\frac{1}{4} = 2\frac{5}{4}$



$$2\frac{5}{4} - 1\frac{3}{4} =$$

$$3\frac{1}{8} - \frac{3}{8} =$$

$$3\frac{1}{8} - 1\frac{1}{2} =$$

Try these by exchanging a whole.

$$2\frac{1}{8} - 1\frac{3}{4} =$$

Which method do you prefer? Why?

$$2\frac{3}{12} - 1\frac{5}{6} =$$

Which method will you choose?

$3\frac{1}{8} - 1\frac{1}{5} =$

$3\frac{1}{8} - \frac{1}{5} =$

$3\frac{1}{8} - 1\frac{3}{5} =$

$8\frac{1}{8} - \frac{3}{5} =$

$3\frac{2}{5} - 1\frac{7}{10} =$

$3\frac{2}{5} - \frac{7}{10} =$

Complete the part-whole model.