Fractions: Add and Subtract Fractions Same Denominator

Aim:	**Success Criteria:**	**Resources:**
Add and subtract fractions with the same denominator and denominators that are multiples of the same number. To subtract fractions with denominators that are multiples of the same number.	I can subtract fractions with the same denominator. I can convert between improper and mixed number fractions. I can use multiplication to change a fraction into an equivalent. I can subtract fractions with denominators that are multiples of the same number.	Lesson Pack
	Key/New Words: Fraction, denominator, numerator, improper, mixed number, equivalent.	**Preparation:** Subtracting Fractions Stained Glass Designs Activity Sheets - one per child Diving into Mastery Activity Sheets - as required

Prior Learning: It will be helpful if children have previous experience of subtracting fractions with the same denominator and recognising improper fractions and converting them to mixed numbers.

Learning Sequence

	**Remember It:** Children add the fractions where denominators are multiples of the same number. Where possible, children represent answers as mixed numbers or improper fractions.	
	**Same Denominators:** Use the animated text and images on the Lesson Presentation to revise how to subtract fractions with the same denominator, discussing what happens to the numerators and denominators. Emphasise that mixed numbers should be converted to the equivalent improper fractions to make the calculation easier. Can children subtract fractions with the same denominator?	
	**Denominator Multiples:** Use the animated text and images on the Lesson Presentation to introduce how to subtract fractions which have denominators that are multiples of the same number, discussing how multiplication is used to change one of the fractions into an equivalent with the same denominator. Emphasise that the same calculation is performed on both the numerator and denominator. Can children use multiplication to change a fraction into an equivalent?	
	**Subtracting Fractions on a Number Line:** Use the step-by-step explanation and animated demonstrations on the Lesson Presentation to show children how using a number line can help when finding the difference between two fractions with different denominators.	
	**Subtracting Fractions:** Children subtract the fractions shown on the Lesson Presentation, representing their answers as proper and improper fractions or mixed numbers. Children check their responses in pairs or independently. Address any misconceptions before progressing onto the main activity. Can children convert between improper and mixed number fractions?	
	**Stained Glass Designs:** Give each child the blank stained-glass design from the Subtracting Fractions Stained Glass Designs Activity Sheets. The children solve the differentiated questions to find out the colour of each stained-glass section. The answers to the stained-glass design are split over all three sheets, so the children will need to share answers to complete the whole design. Can children subtract fractions with denominators that are multiples of the same number?  Children show they can subtract fractions with denominators that are multiples of the same number.  Children show they can subtract fractions with denominators that are multiples of the same number, including converting mixed numbers and improper fractions.  Children show they can subtract fractions with denominators that are multiples of the same number, including converting mixed numbers and improper fractions and trickier multiplication facts.	

Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and others may 'dive straight in to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

Children complete fluency questions involving subtracting two fractions with denominators that are multiples of the same number using number lines and bar models.

Children answer reasoning questions involving subtracting two fractions with denominators that are multiples of the same number, explaining their reasoning.

Children work individually or collaboratively on problem-solving investigations involving subtracting two fractions with denominators that are multiples of the same number.

Prove It: Children discuss the calculations shown on the , deciding if the answer is correct or incorrect. Encourage the children to prove how they know the calculation is correct or incorrect.

Exploreit

Subtractit: Roll a dice to generate a denominator for two fractions. Roll the dice again to generate different numerators to create a subtraction calculation, putting the larger number first. This can be extended to subtracting three or more fractions.

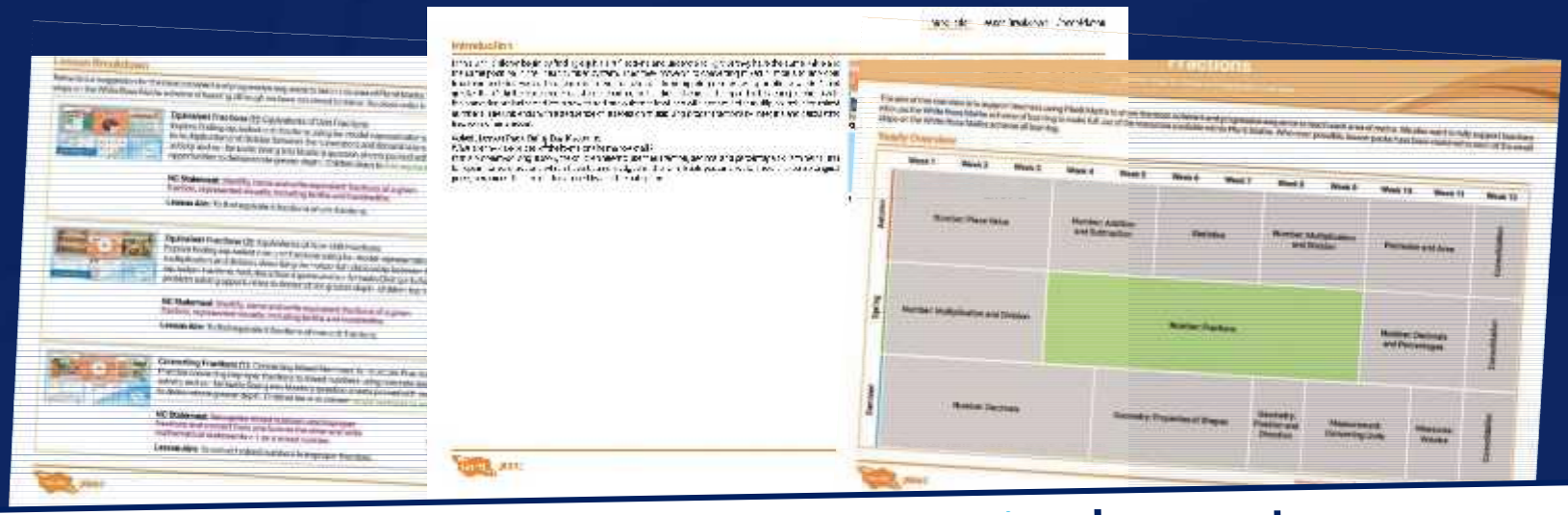
Matchit: Use these to revise subtracting fractions. Choose two cards and then subtract the smaller fraction from the larger one.

Learnit: Children may find this useful when learning how to compare and order fractions less than one.

Maths

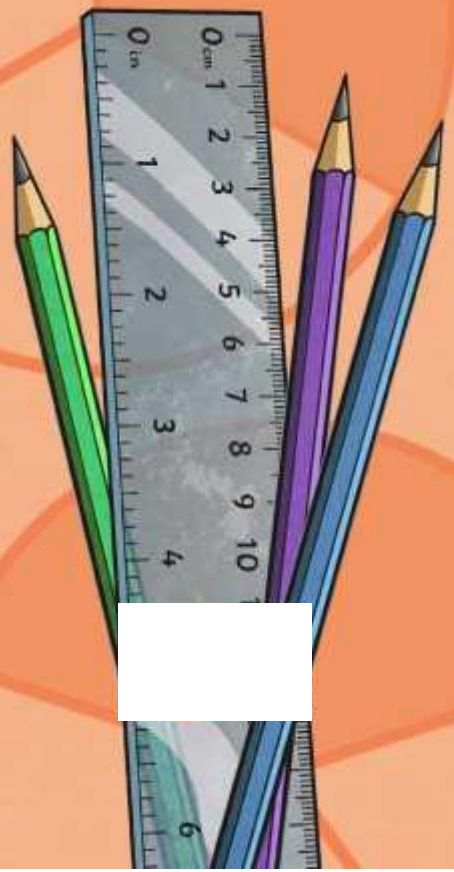
Fractions

Need a coherently planned sequence of lessons to complement this resource?



See our document.

Subtract Fractions



Aim

- To subtract fractions with denominators that are multiples of the same number.

Success Criteria

- I can subtract fractions with the same denominator.
- I can convert between improper and mixed number fractions.
- I can use multiplication to change a fraction into an equivalent.
- I can subtract fractions with denominators that are multiples of the same number.

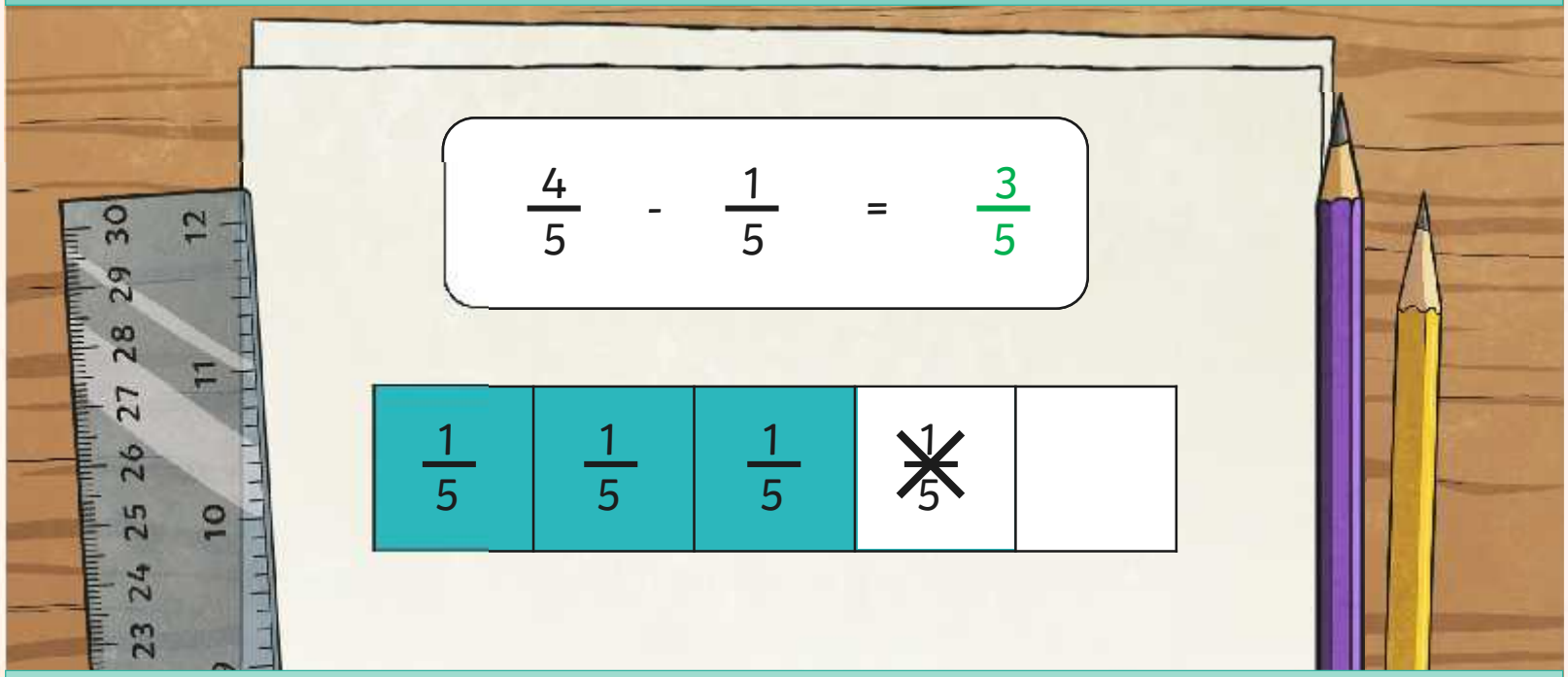
Remember It

Add fractions with denominators that are multiples of the same number.
If your answers are above one, represent them as
improper fractions and mixed numbers.

Question	Answer
$\frac{1}{5} + \frac{3}{5} =$	$\frac{4}{5}$
$\frac{3}{4} + \frac{5}{12} =$	$\frac{14}{12}$ or $1\frac{2}{12}$
$\frac{5}{3} + \frac{1}{9} =$	$\frac{16}{9}$ or $1\frac{7}{9}$
$\frac{5}{7} + \frac{1}{8} + \frac{32}{56} =$	$\frac{40}{56} + \frac{7}{56} + \frac{32}{56} = \frac{79}{56}$ or $1\frac{23}{56}$
$\frac{4}{10} + \frac{1}{5} + \frac{\square}{15} = \frac{24}{30}$	$\frac{4}{10} + \frac{1}{5} + \frac{3}{15} = \frac{24}{30}$

Same Denominators

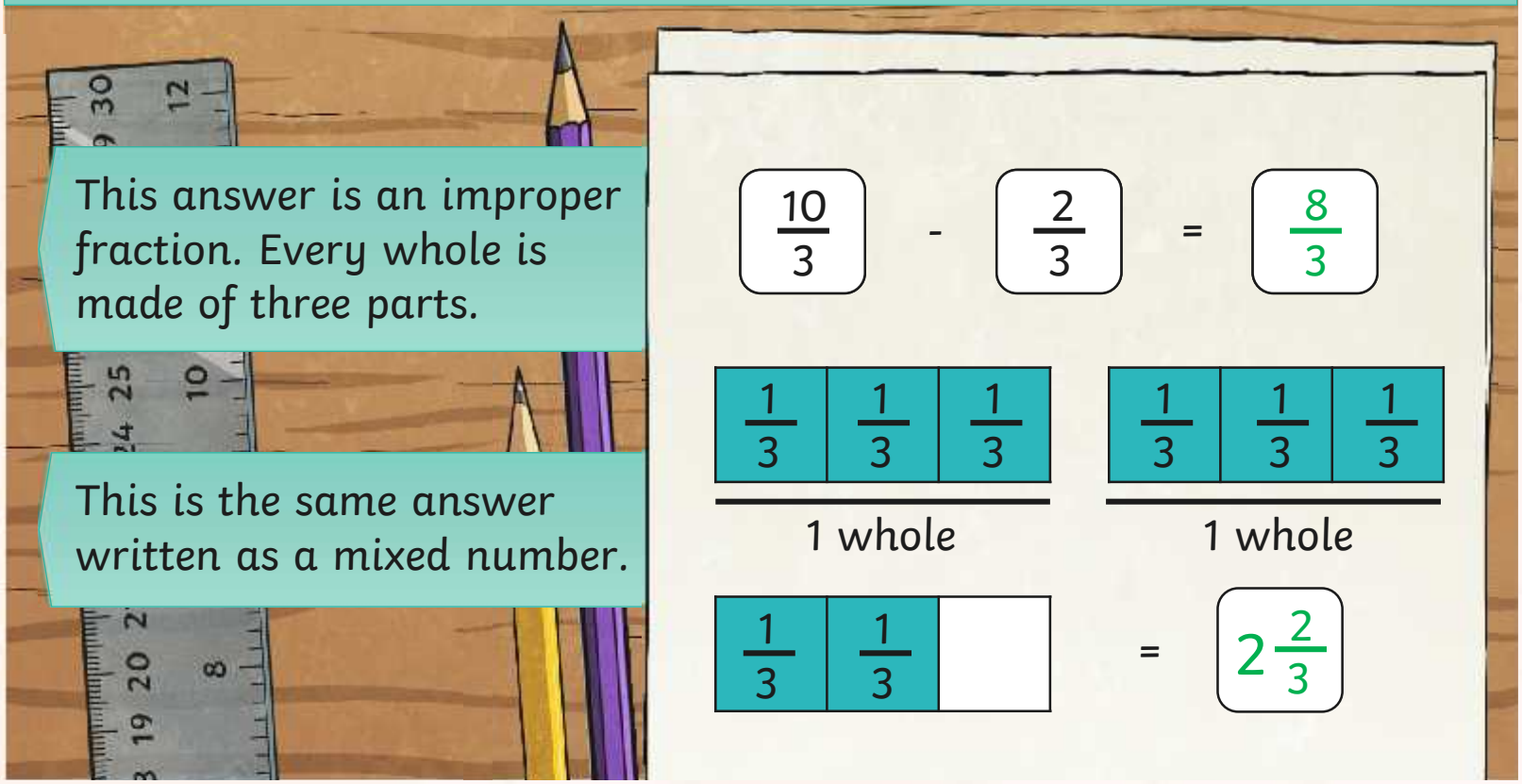
In this fraction subtraction, both the fractions have the **same denominator.**



To solve the calculation, the **denominator stays the same**, and the **numerators are subtracted.**

Same Denominators

In this fraction subtraction, both the fractions have the **same denominator.**



This answer is an improper fraction. Every whole is made of three parts.

This is the same answer written as a mixed number.

$\frac{10}{3} - \frac{2}{3} = \frac{8}{3}$

$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$

1 whole

$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$

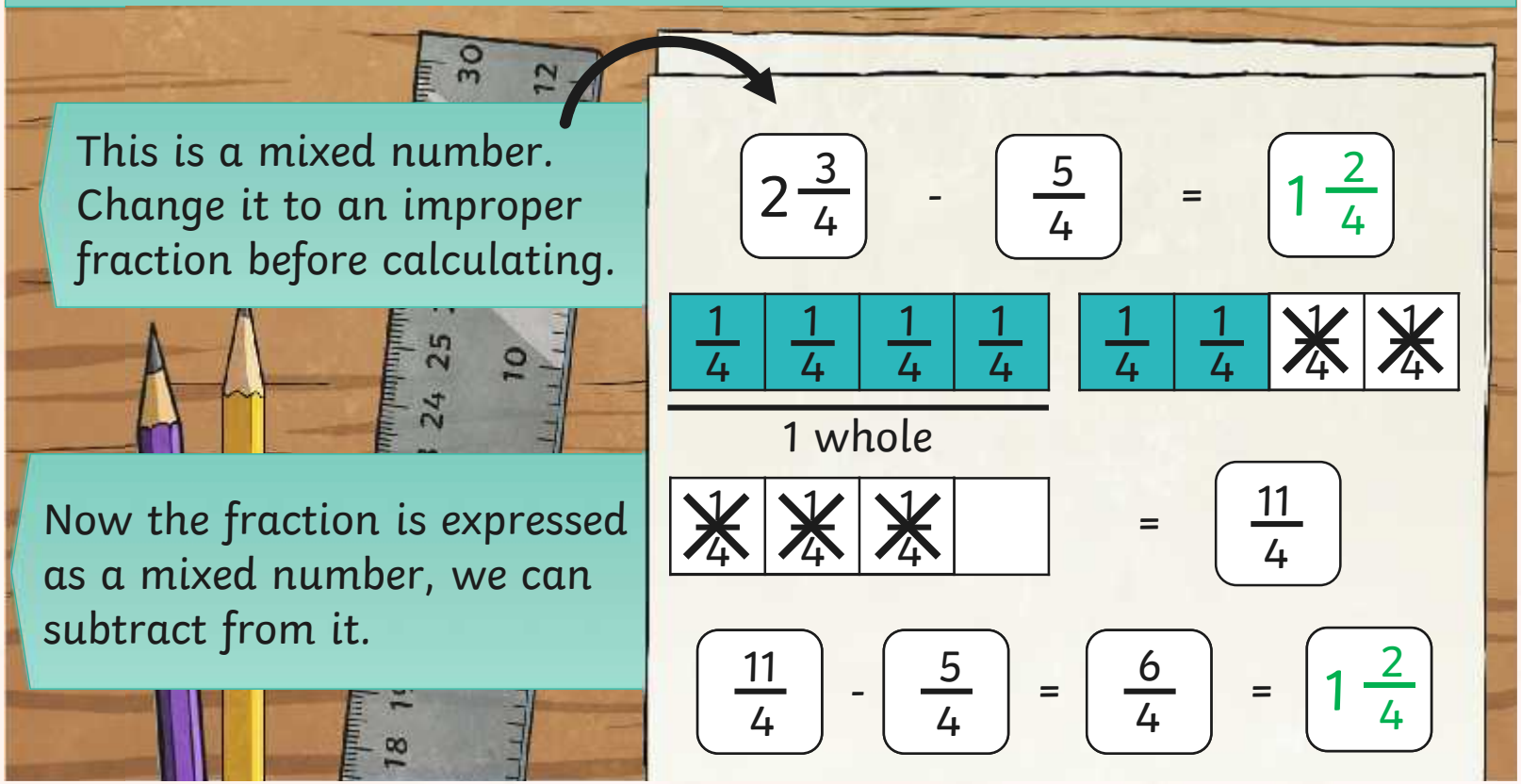
1 whole

$\frac{1}{3}$	$\frac{1}{3}$	

$= 2\frac{2}{3}$

Same Denominators

In this fraction subtraction, both the fractions have the **same denominator.**



This is a mixed number. Change it to an improper fraction before calculating.

Now the fraction is expressed as a mixed number, we can subtract from it.

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

$\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ | $\frac{1}{4}$ $\frac{1}{4}$ ~~$\frac{1}{4}$~~ ~~$\frac{1}{4}$~~

1 whole

~~$\frac{1}{4}$~~ ~~$\frac{1}{4}$~~ ~~$\frac{1}{4}$~~ | = $\frac{11}{4}$

$$\frac{11}{4} - \frac{5}{4} = \frac{6}{4} = 1\frac{2}{4}$$

Same Denominator

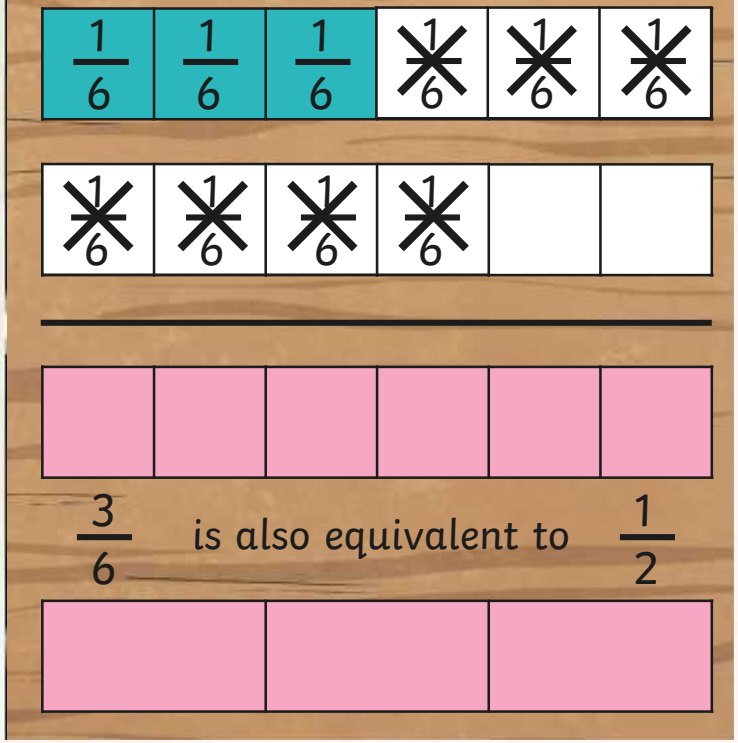
In this fraction subtraction, both the fractions have **different denominators** which are multiples of the same number.

$$\frac{5}{3} - \frac{7}{6} = \frac{1}{2}$$

To solve the calculation, we use multiplication to change five thirds into the equivalent sixths fraction.

$$\frac{5}{3} \xrightarrow{\times 2} \frac{10}{6}$$

$$\frac{10}{6} - \frac{7}{6} = \frac{3}{6}$$



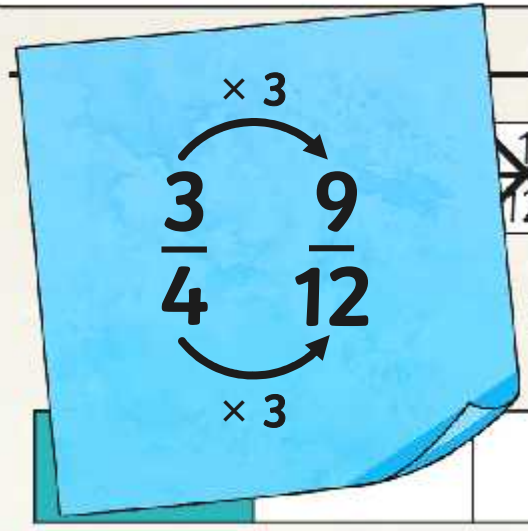
Denominator Multiples

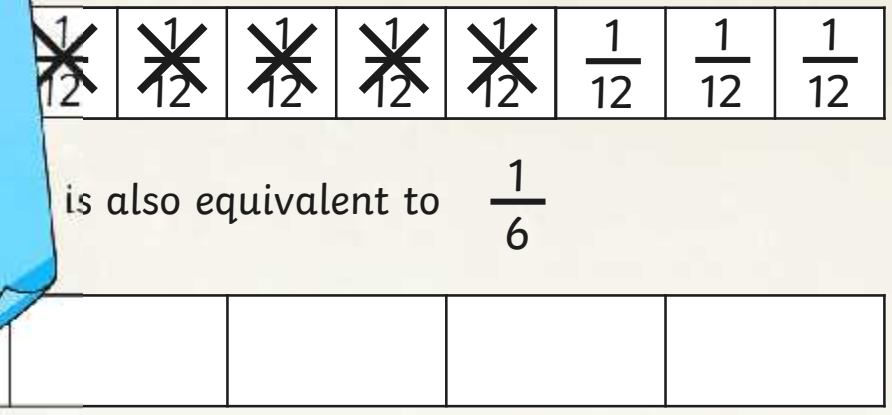
Whole Class

Let's try this with another calculation where the fractions have **different denominators** which are multiples of the same number.

$$\frac{9}{12} - \frac{7}{12} = \frac{2}{12}$$

To solve the calculation, we use **multiplication** to change the fraction with the lowest denominator into an **equivalent fraction** with the same denominator as the other fraction.





is also equivalent to $\frac{1}{6}$

Denominator Multiples

Let's try this with another calculation where the fractions have **different denominators** which are multiples of the same number.

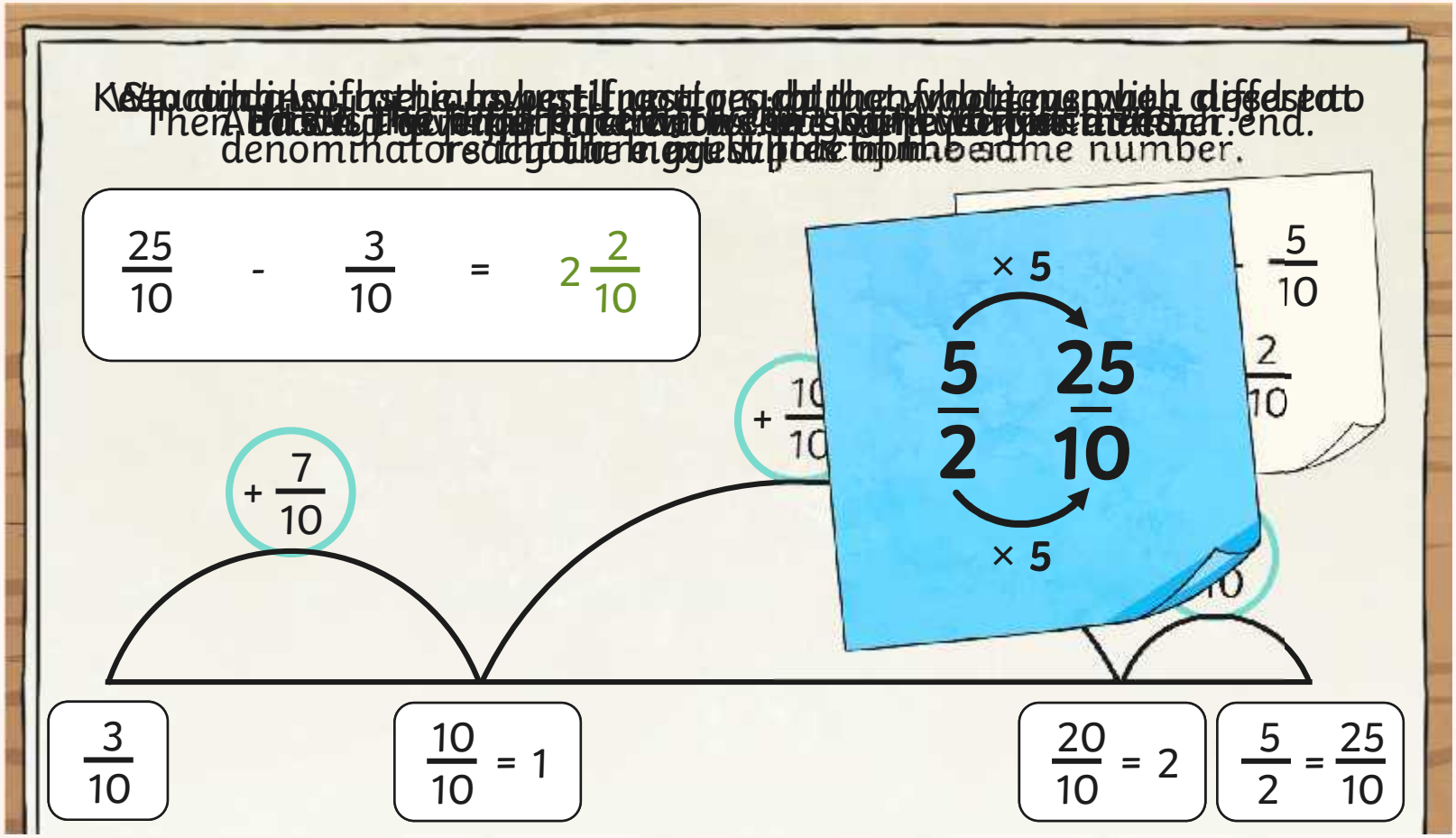
$$\frac{25}{10} - \frac{3}{10} = \frac{22}{10}$$

To solve the calculation, we use **multiplication** to change the fraction with the lowest denominator into an **equivalent fraction** with the same denominator as the other fraction.

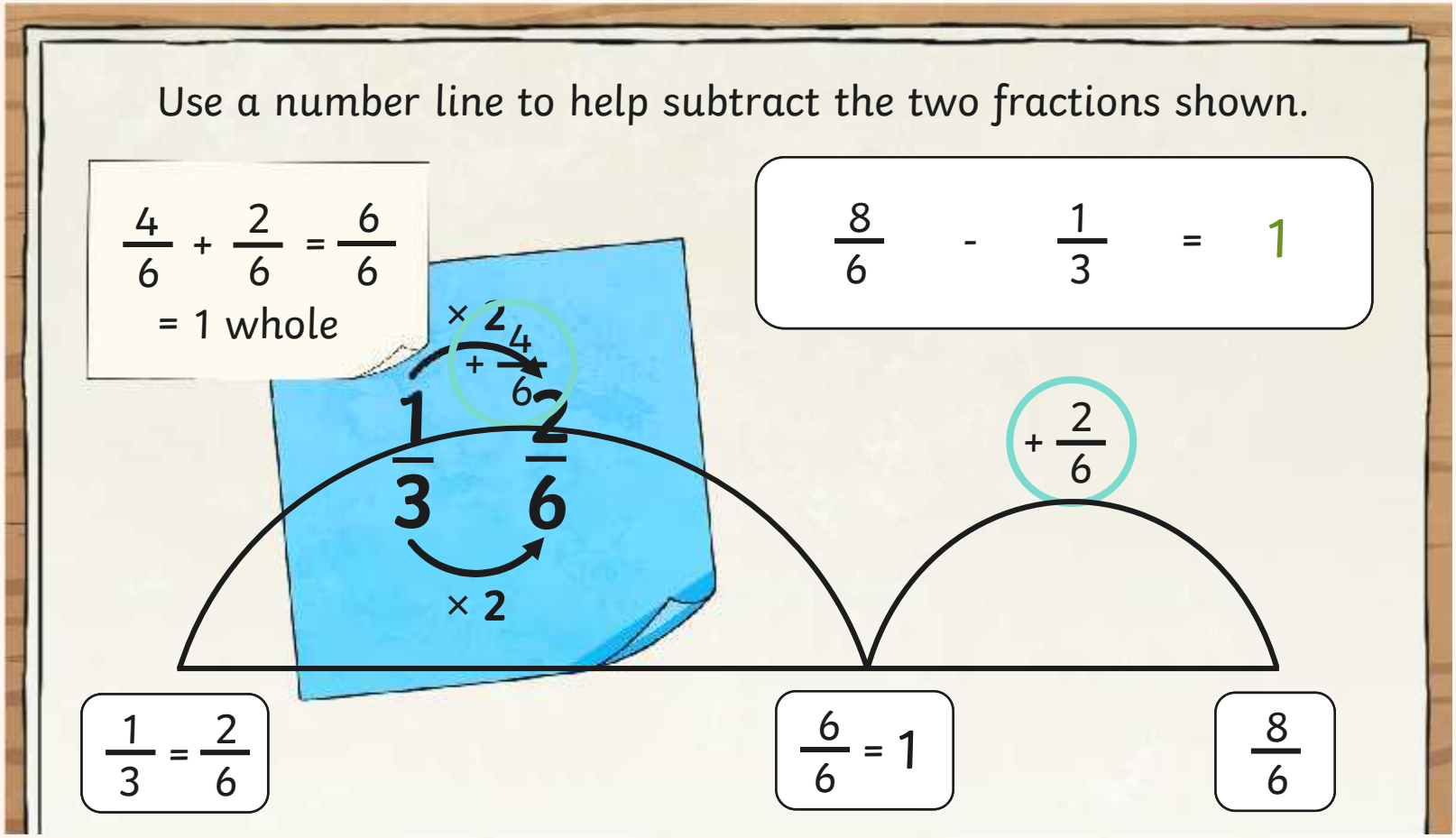
$$\frac{5}{2} \xrightarrow{\times 5} \frac{25}{10}$$

$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	= 1 whole
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	= 1 whole
					$= 2\frac{2}{10}$

Subtracting Fractions on a Number Line



Subtracting Fractions on a Number Line

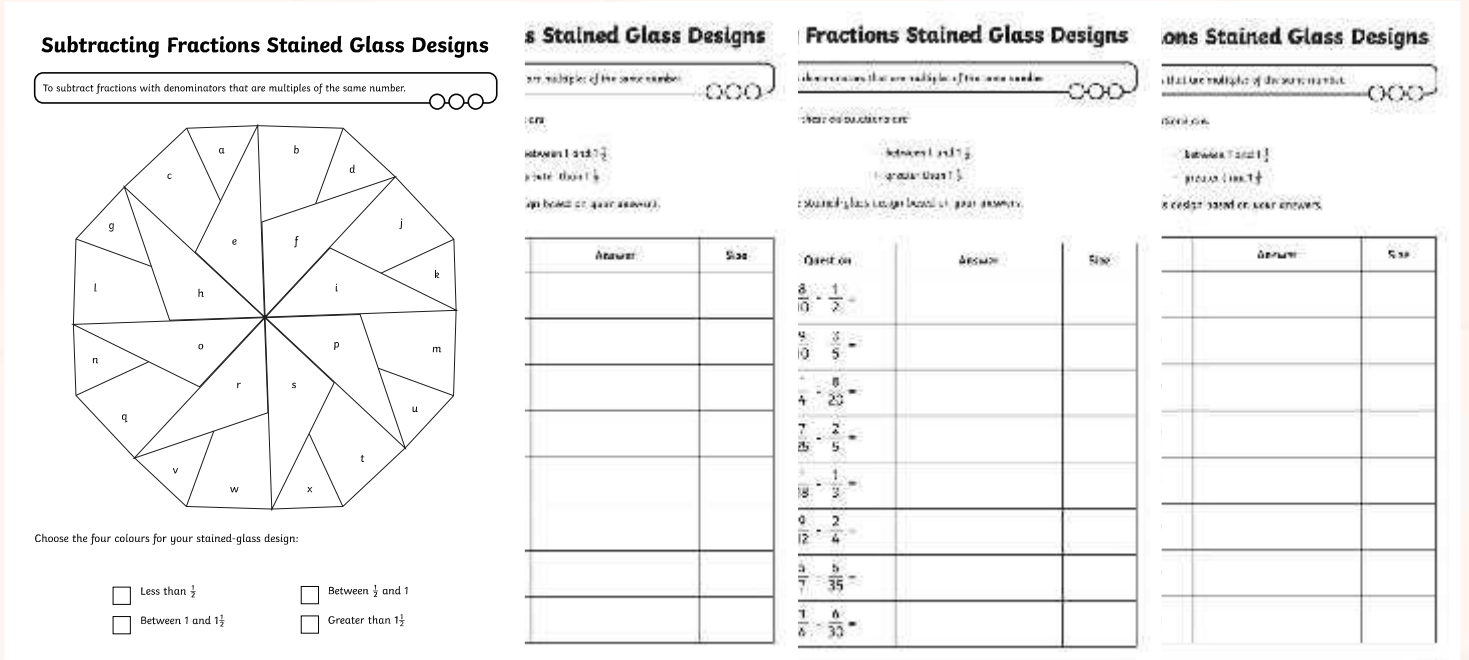


Subtracting Fractions

Subtract the fractions shown. Represent each fraction in its simplest form where possible.

Question	Answer
$\frac{2}{5} - \frac{1}{10} =$	$\frac{3}{10}$
$\frac{8}{9} - \frac{2}{3} =$	$\frac{2}{9}$
$\frac{11}{3} - \frac{2}{6} =$	$\frac{10}{3}$ or $3\frac{1}{3}$
$\frac{15}{7} - \frac{9}{14} =$	$\frac{21}{14}$ or $\frac{3}{2}$ or $1\frac{1}{2}$
$1\frac{1}{9} - \frac{2}{3} =$	$\frac{4}{9}$

Stained Glass Designs



Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.

Choose the four colours for your stained-glass design:

- ☐ Less than $\frac{1}{2}$
- ☐ Between $\frac{1}{2}$ and 1
- ☐ Between 1 and $1\frac{1}{2}$
- ☐ Greater than $1\frac{1}{2}$

s Stained Glass Designs

Answer	Size

Fractions Stained Glass Designs

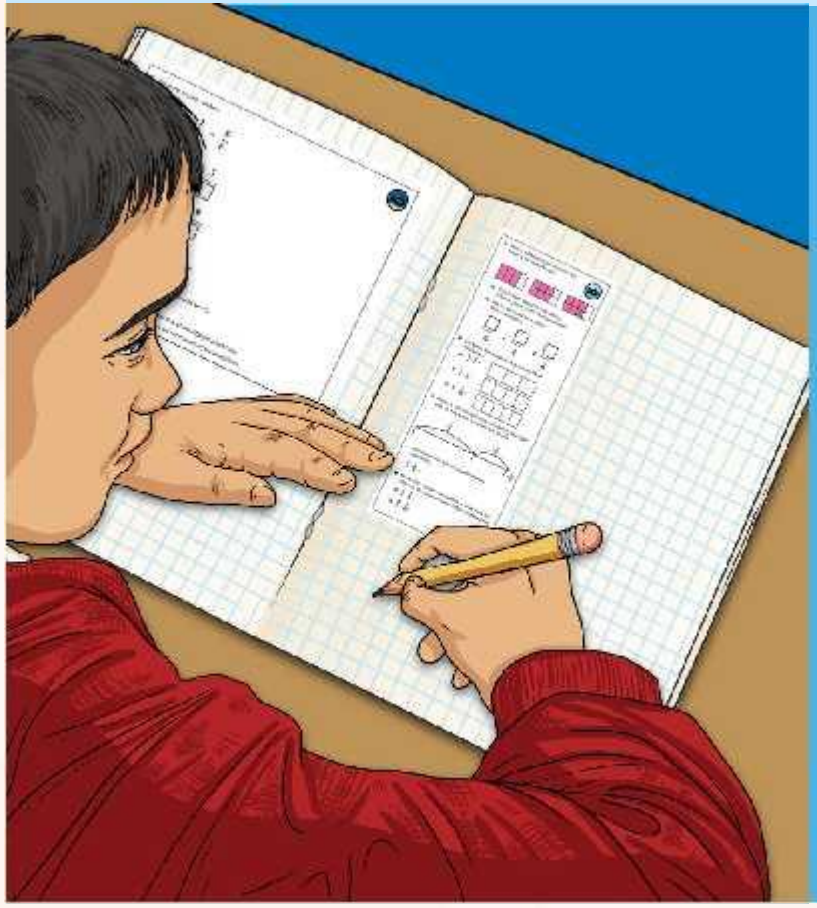
Question	Answer	Size
$\frac{8}{10} - \frac{1}{2} =$		
$\frac{9}{10} - \frac{3}{5} =$		
$\frac{3}{4} - \frac{8}{20} =$		
$\frac{7}{25} - \frac{2}{5} =$		
$\frac{5}{18} - \frac{1}{3} =$		
$\frac{9}{12} - \frac{2}{4} =$		
$\frac{6}{7} - \frac{5}{35} =$		
$\frac{7}{6} - \frac{6}{33} =$		

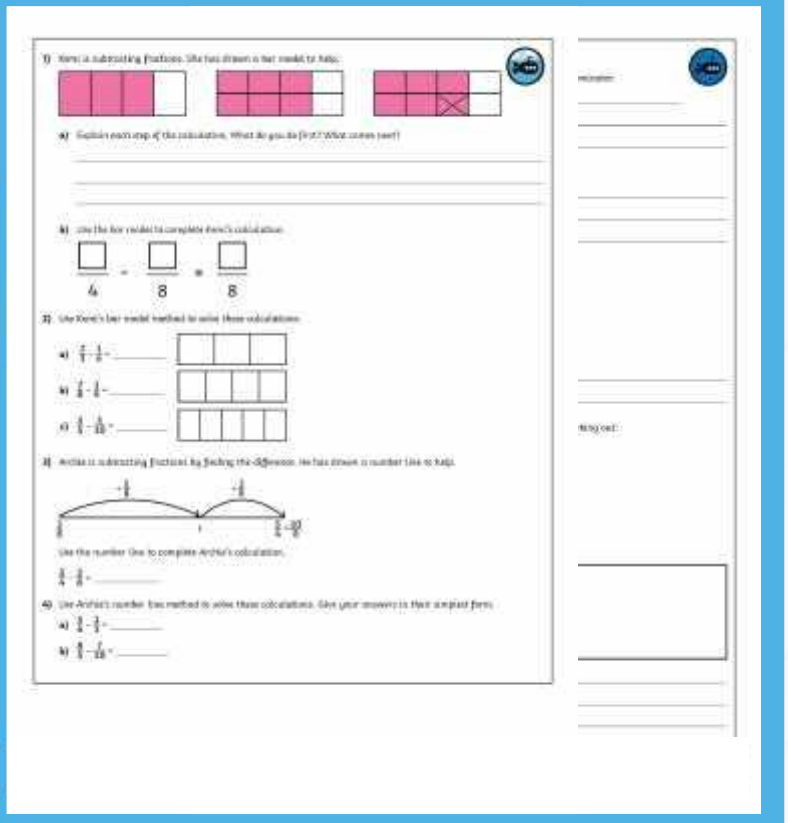
ons Stained Glass Designs

Answer	Size

Diving into Mastery

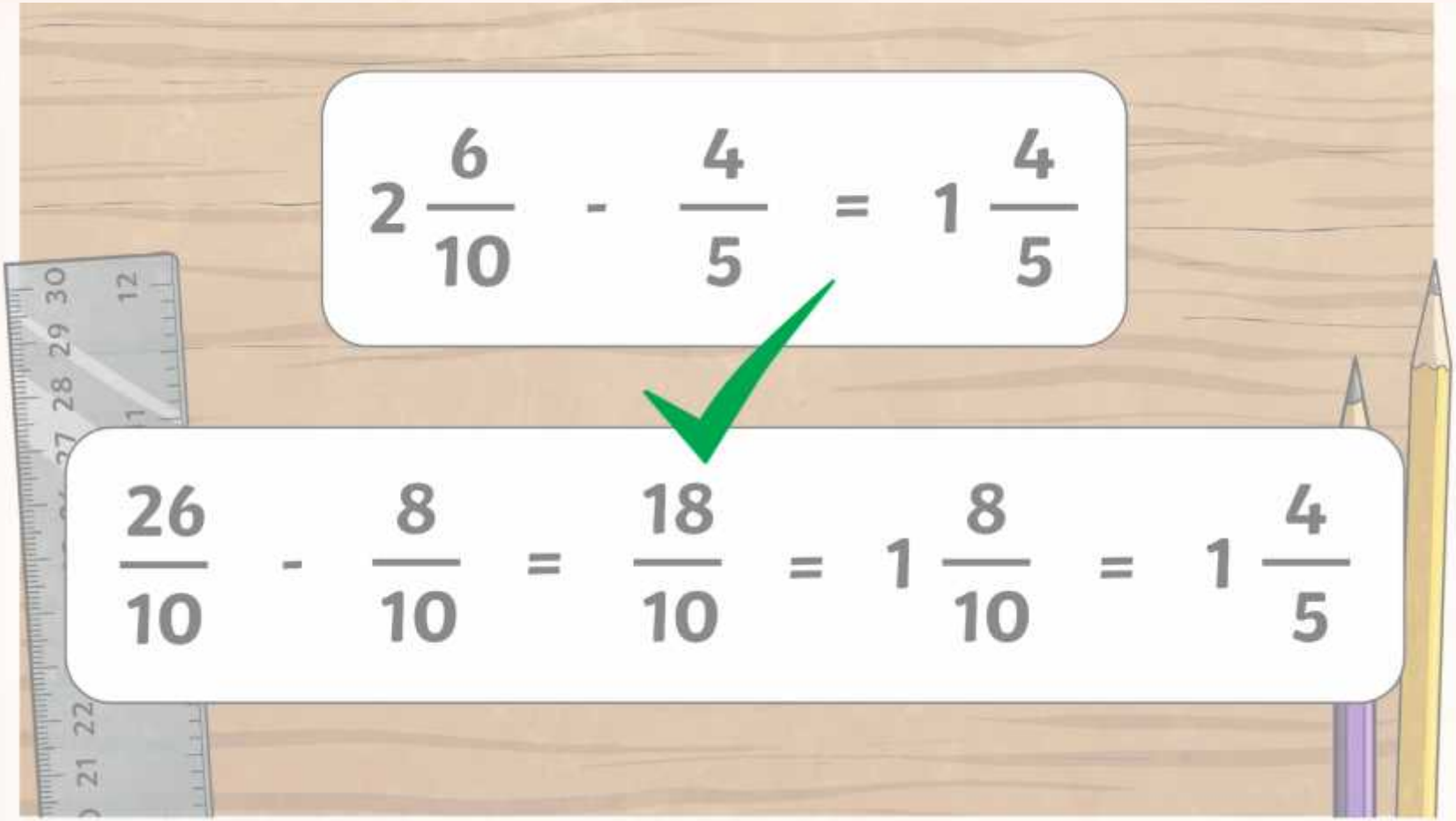
Dive in by completing your own activity!





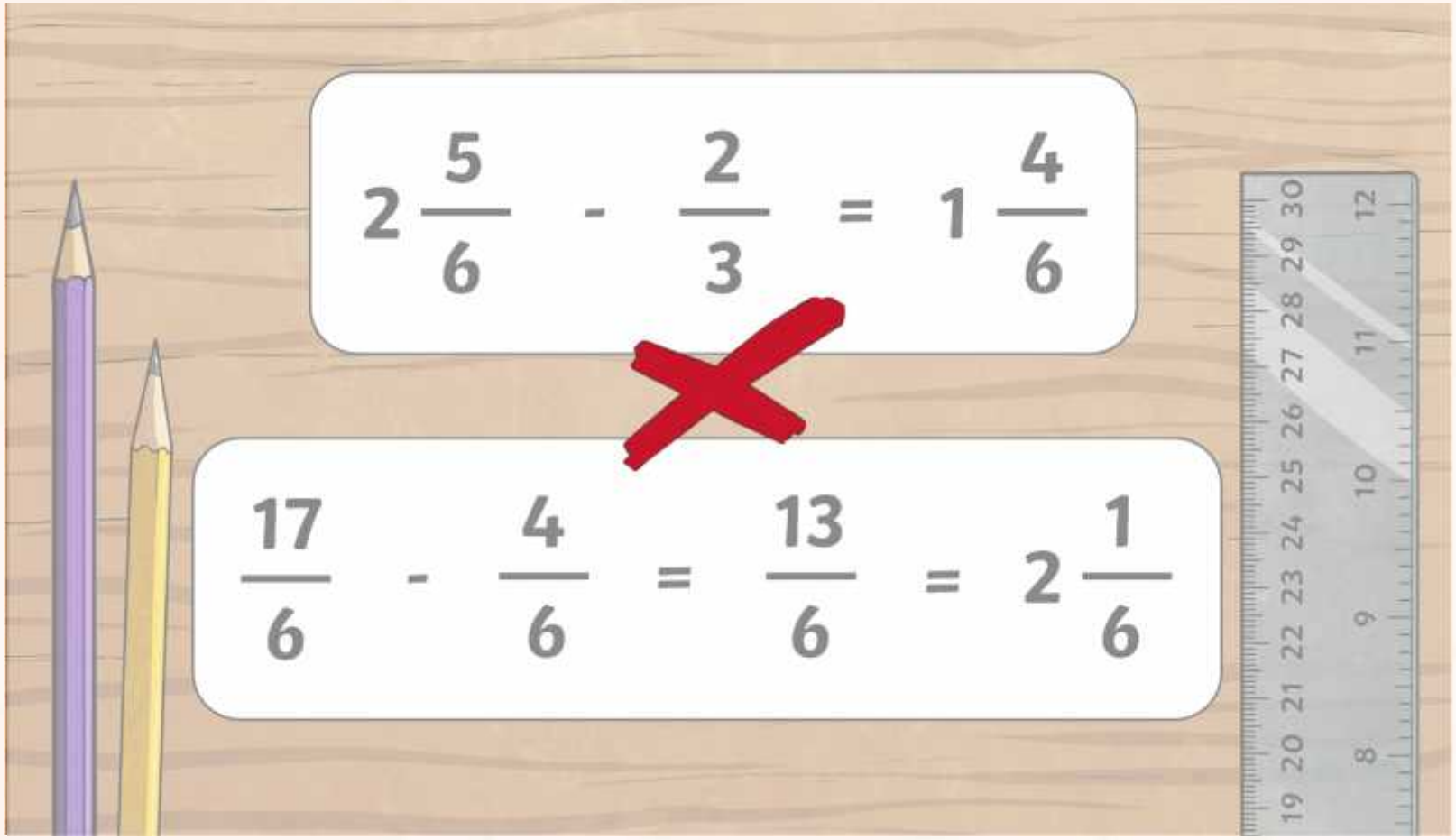
Prove It

Is this calculation correct? Prove it!



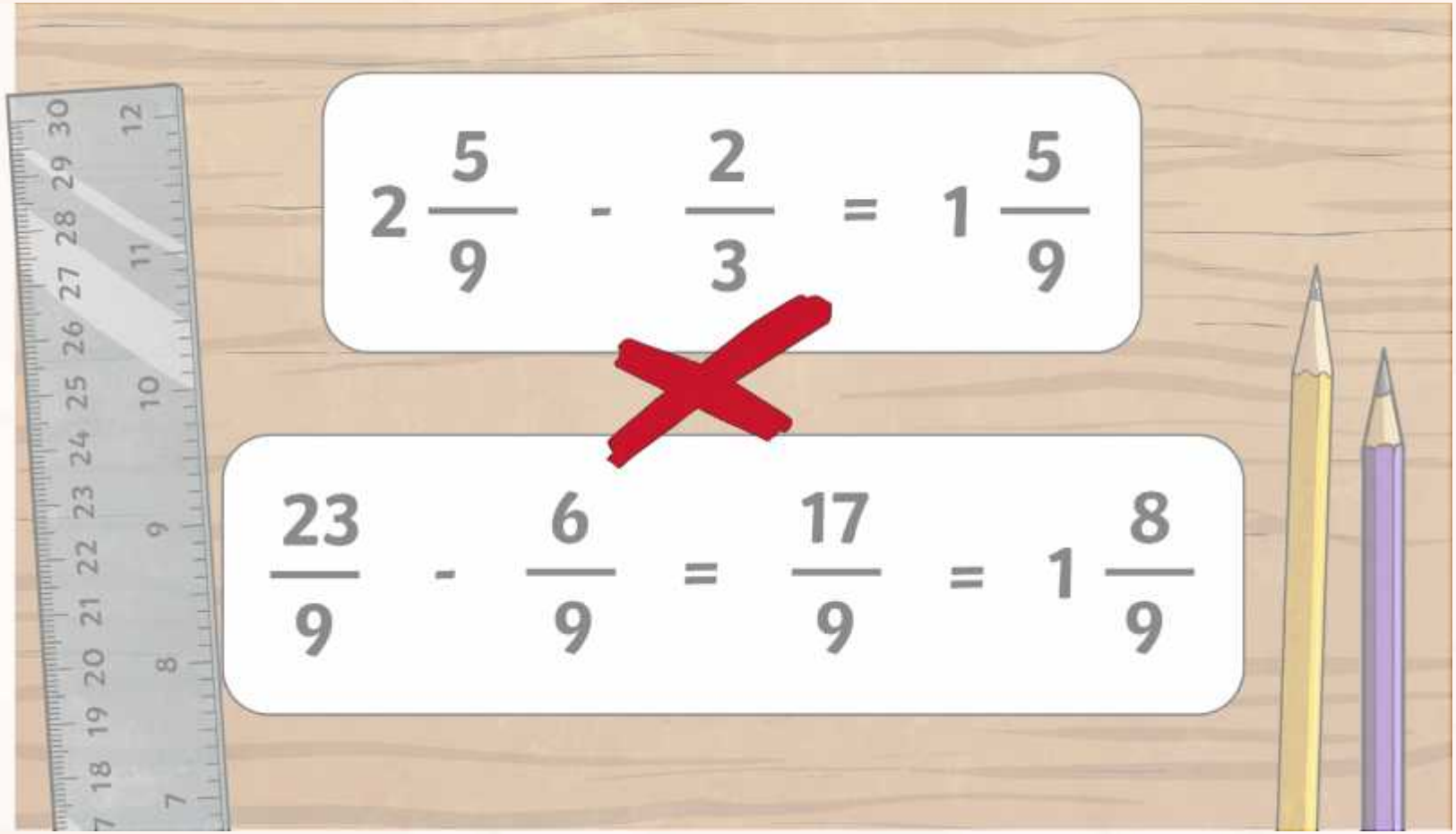
Prove It

Is this calculation correct? Prove it!



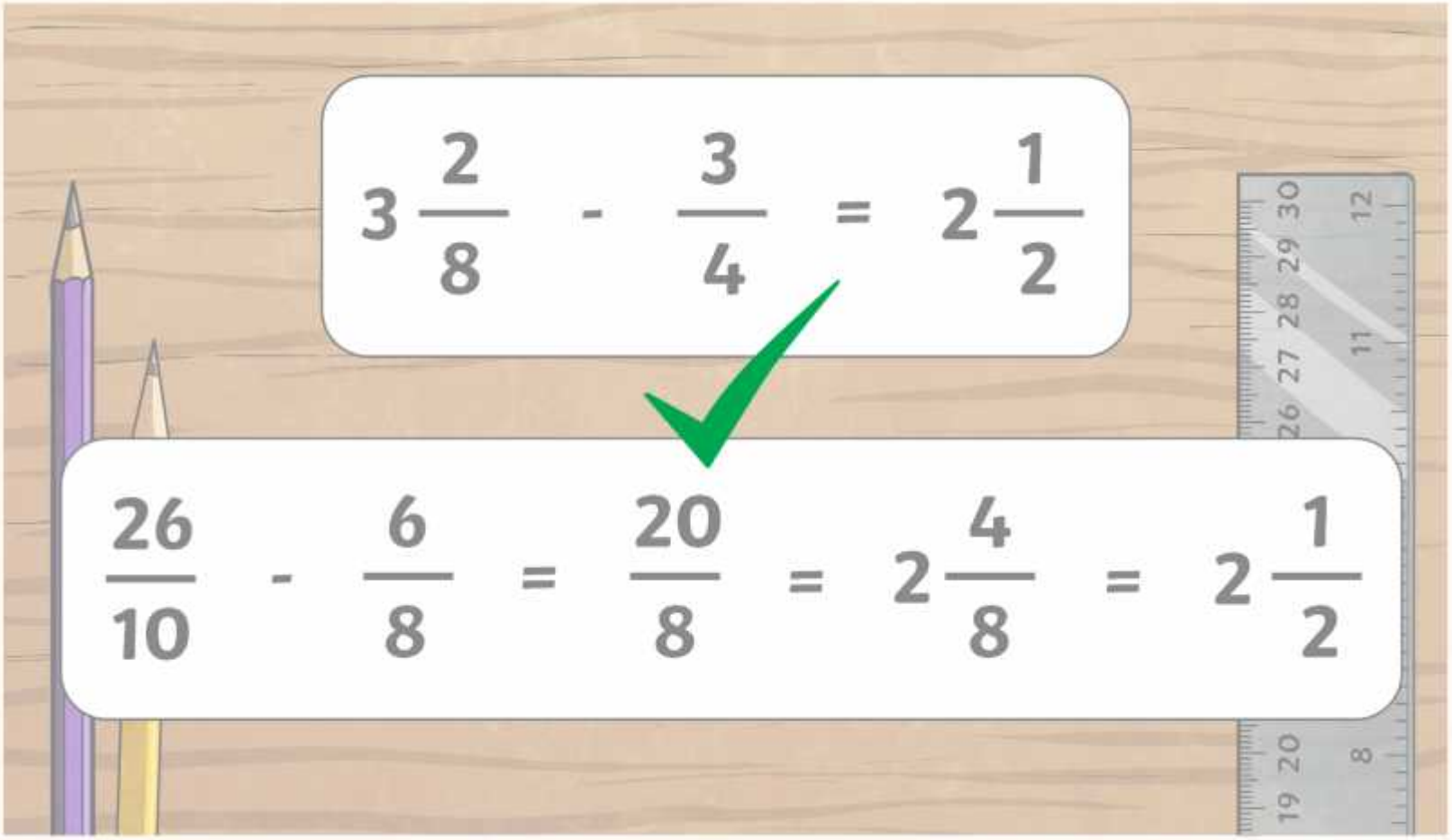
Prove It

Is this calculation correct? Prove it!



Prove It

Is this calculation correct? Prove it!

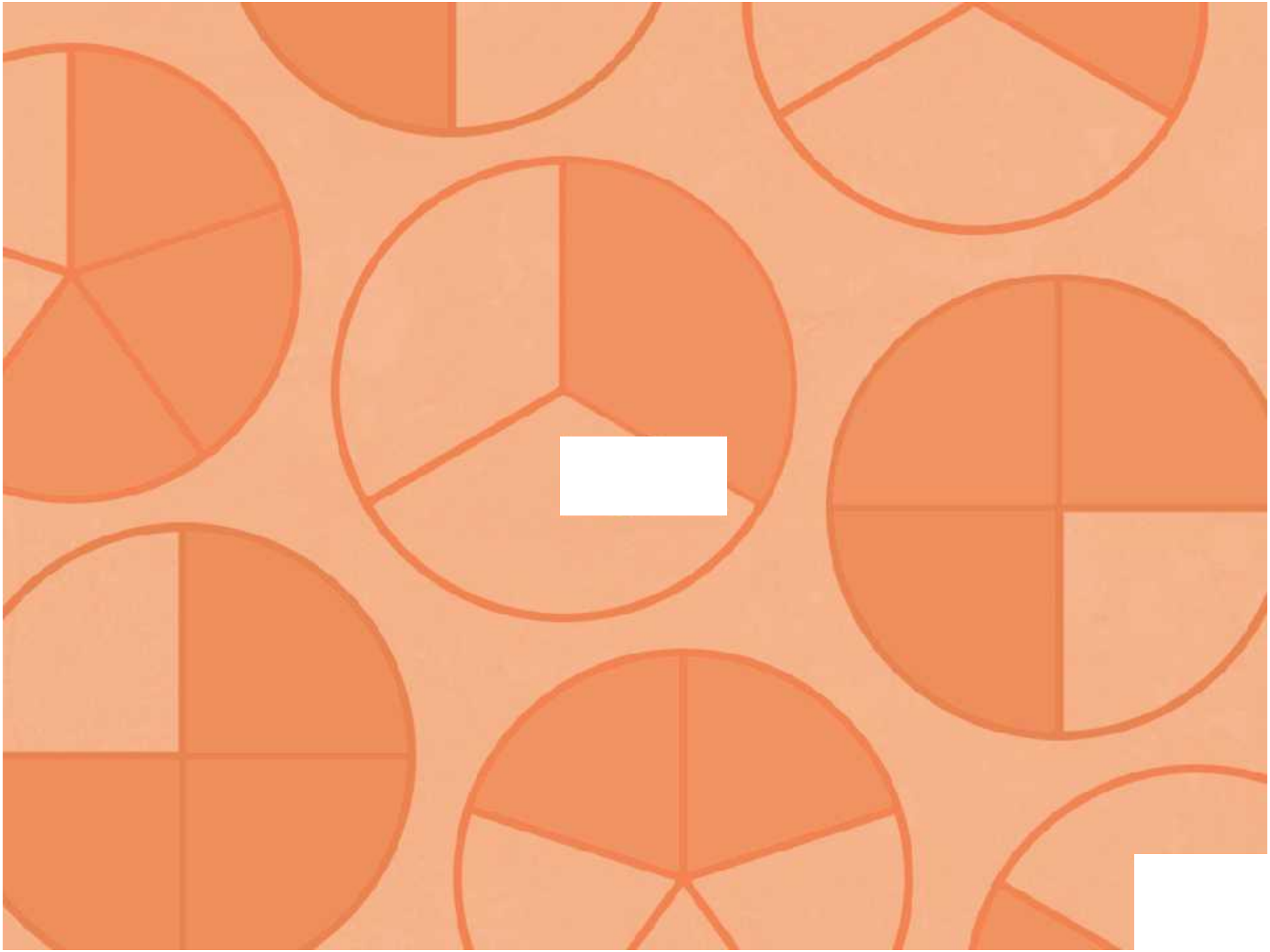


Aim

- To subtract fractions with denominators that are multiples of the same number.

Success Criteria

- I can subtract fractions with the same denominator.
- I can convert between improper and mixed number fractions.
- I can use multiplication to change a fraction into an equivalent.
- I can subtract fractions with denominators that are multiples of the same number.



Aim: To subtract fractions with denominators that are multiples of the same number.				**Date:**					
				Delivered By:			**Support:**		
Success Criteria	**Me**	**Friend**	**Teacher**	**T**	**PPA**	**S**	**I**	**AL**	**GP**
I can subtract fractions with the same denominator.				**Notes/Evidence**					
I can convert between improper and mixed number fractions.									
I can use multiplication to change a fraction into an equivalent.									
I can subtract fractions with denominators that are multiples of the same number.									

Next Steps

- _____
- _____

T	Teacher	**I**	Independent
PPA	Planning, Preparation and Assessment	**AL**	Adult Led
S	Supply	**GP**	Guided Practice

Aim: To subtract fractions with denominators that are multiples of the same number.				**Date:**					
				Delivered By:			**Support:**		
Success Criteria	**Me**	**Friend**	**Teacher**	**T**	**PPA**	**S**	**I**	**AL**	**GP**
I can subtract fractions with the same denominator.				**Notes/Evidence**					
I can convert between improper and mixed number fractions.									
I can use multiplication to change a fraction into an equivalent.									
I can subtract fractions with denominators that are multiples of the same number.									

Next Steps

- _____
- _____

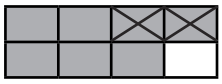
T	Teacher	**I**	Independent
PPA	Planning, Preparation and Assessment	**AL**	Adult Led
S	Supply	**GP**	Guided Practice

1) a) **First, you find an equivalent fraction for one of the fractions so that both fractions have a common denominator. Then, you subtract the second fraction from the first fraction.**

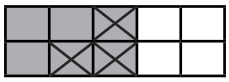
b) $\frac{3}{4} - \frac{1}{8} = \frac{5}{8}$

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

b) $\frac{7}{8} - \frac{1}{4} = \frac{5}{8}$

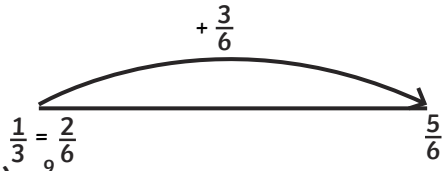


c) $\frac{3}{5} - \frac{3}{10} = \frac{3}{10}$

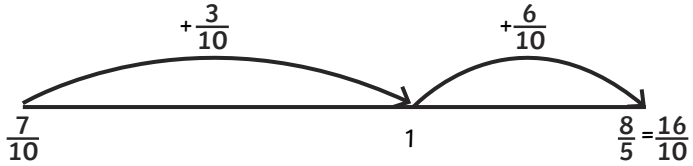


3) $\frac{5}{4} - \frac{3}{8} = \frac{7}{8}$

4) a) $\frac{3}{6} = \frac{1}{2}$



b) $\frac{9}{10}$

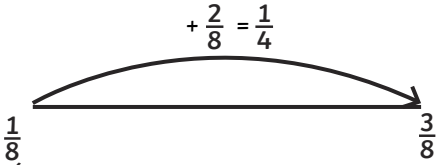


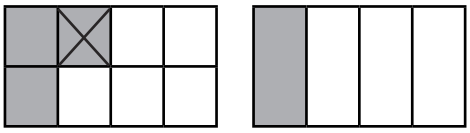
1) a) **This is never true. You only subtract the numerators. If you subtracted the denominators, it would no longer describe how many parts are in one whole.**

b) **This is always true. You must change one of the fractions into an equivalent fraction first. Both fractions need to have the same denominator so the parts that make up each whole are equal. This allows you to add them together or subtract them from each other.**

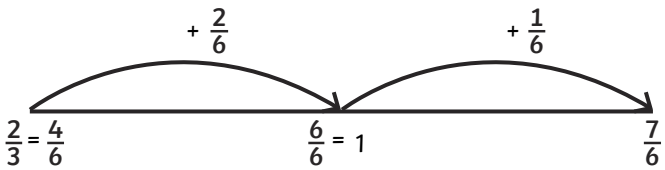
2) $\frac{3}{8} - \frac{1}{8} = \frac{2}{8} = \frac{1}{4}$

Children may have used one of these methods to answer this question:





3) $\frac{6}{6}$ **is equivalent to 1 whole. They should be at the same point on the number line, so Afzol should only have added one jump of** $\frac{2}{6}$ **and another jump of** $\frac{1}{6}$ **to reach** $\frac{7}{6}$**.**



$\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$ (This is equal to $\frac{1}{2}$.)

1) Children may have used the inverse to solve these.

a) $\frac{9}{6} - \frac{2}{3} = \frac{5}{6}$ **as** $\frac{9}{6} - \frac{4}{6} = \frac{5}{6}$

b) $\frac{3}{8} - \frac{1}{4} = \frac{1}{8}$ **as** $\frac{3}{8} - \frac{2}{8} = \frac{1}{8}$

Also $\frac{3}{4} - \frac{1}{4} = \frac{1}{2}$ **as** $\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$

c) $\frac{6}{5} - \frac{3}{10} = \frac{9}{10}$ as $\frac{12}{10} - \frac{3}{10} = \frac{9}{10}$

2)

a) $\frac{14}{15}$ and $\frac{3}{5}$

$\frac{11}{15}$ and $\frac{2}{5}$

$\frac{8}{15}$ and $\frac{1}{5}$

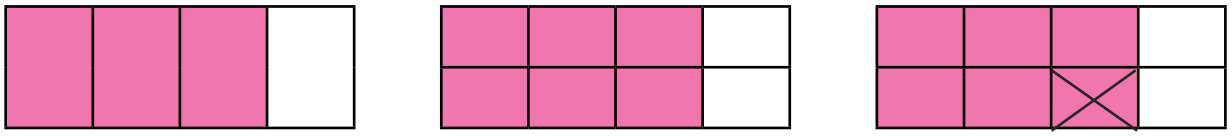
$\frac{4}{5}$ and $\frac{7}{15}$

$\frac{3}{5}$ and $\frac{4}{15}$

$\frac{2}{5}$ and $\frac{1}{15}$

b) Children should have explained that working systematically ensured that they did not miss any of the possibilities. For example, they could find pairs of numbers with a difference of 5 (14 and 9, 13 and 8, 12 and 7, 11 and 6, 10 and 5, 9 and 4, 8 and 3, 7 and 2, 6 and 1) and then use these as numerators to see if they can make fractions that fit the criteria.

1) Kemi is subtracting fractions. She has drawn a bar model to help.



a) Explain each step of the calculation. What do you do first? What comes next?

b) Use the bar model to complete Kemi's calculation.

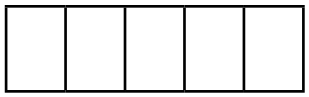
$$\frac{\square}{4} - \frac{\square}{8} = \frac{\square}{8}$$

2) Use Kemi's bar model method to solve these calculations.

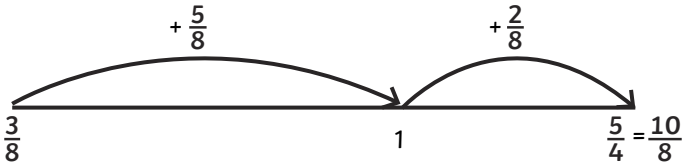
a) $\frac{2}{3} - \frac{1}{6} =$ _____

b) $\frac{7}{8} - \frac{1}{4} =$ _____

c) $\frac{3}{5} - \frac{3}{10} =$ _____



3) Archie is subtracting fractions by finding the difference. He has drawn a number line to help.



Use the number line to complete Archie's calculation.

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

4) Use Archie's number line method to solve these calculations. Give your answers in their simplest form.

a) $\frac{5}{6} - \frac{1}{3} =$ _____

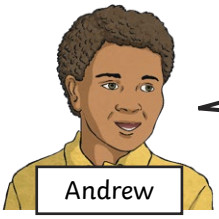
b) $\frac{8}{5} - \frac{7}{10} =$ _____

1) Is each statement always, sometimes or never true? Explain how you know.

a) When you subtract fractions, you subtract both the numerator and the denominator.

b) You can't add or subtract fractions with different denominators.

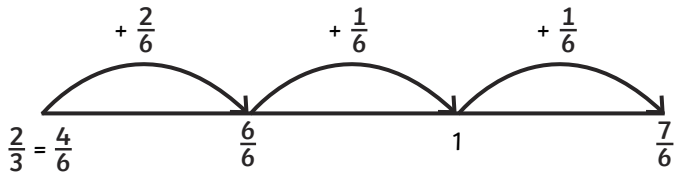
2)



Andrew

Convince me that $\frac{3}{8} - \frac{1}{8} = \frac{1}{4}$.

3) Afzol used a number line to find the difference between $\frac{7}{6}$ and $\frac{2}{3}$. Here is his working out:



$\frac{2}{6} + \frac{1}{6} + \frac{1}{6} = \frac{4}{6}$

What mistake did he make? Show your working here.

1) Fill in the missing numbers.

a) $\frac{\square}{\square} - \frac{2}{3} = \frac{5}{6}$

b) $\frac{3}{\square} - \frac{1}{4} = \frac{1}{\square}$

c) $\frac{6}{5} - \frac{\square}{10} = \frac{9}{\square}$

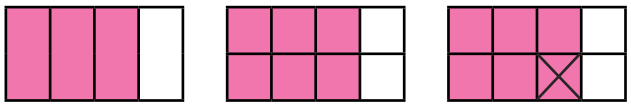
2) Clara is thinking of two fractions.

- Each fraction has a different denominator.
- They have a difference of $\frac{5}{15}$.
- Each fraction is less than one whole.
- The largest number that the denominators could be is 15.
- The fractions are in their simplest form.

a) What fractions could she be thinking of? Find all the different possibilities.

b) Explain how you can make sure that you did not miss any of the possibilities.

1) Kemi is subtracting fractions. She has drawn a bar model to help.



a) Explain each step of the calculation. What do you do first? What comes next?

b) Use the bar model to complete Kemi's calculation.

$$\frac{\square}{4} - \frac{\square}{8} = \frac{\square}{8}$$

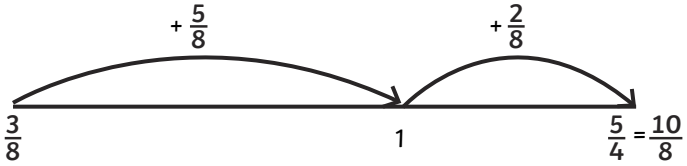
2) Use Kemi's bar model method to solve these calculations.

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

b) $\frac{7}{8} - \frac{1}{4} =$

c) $\frac{3}{5} - \frac{3}{10} =$

3) Archie is subtracting fractions by finding the difference. He has drawn a number line to help.



Use the number line to complete Archie's calculation.

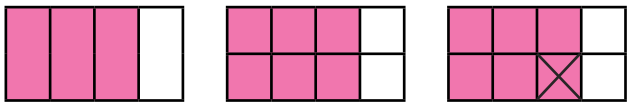
$\frac{5}{4} - \frac{3}{8} =$

4) Use Archie's number line method to solve these calculations. Give your answers in their simplest form.

a) $\frac{5}{6} - \frac{1}{3} =$

b) $\frac{8}{5} - \frac{7}{10} =$

1) Kemi is subtracting fractions. She has drawn a bar model to help.



a) Explain each step of the calculation. What do you do first? What comes next?

b) Use the bar model to complete Kemi's calculation.

$$\frac{\square}{4} - \frac{\square}{8} = \frac{\square}{8}$$

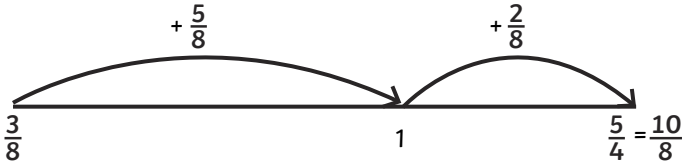
2) Use Kemi's bar model method to solve these calculations.

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

b) $\frac{7}{8} - \frac{1}{4} =$

c) $\frac{3}{5} - \frac{3}{10} =$

3) Archie is subtracting fractions by finding the difference. He has drawn a number line to help.



Use the number line to complete Archie's calculation.

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

4) Use Archie's number line method to solve these calculations. Give your answers in their simplest form.

a) $\frac{5}{6} - \frac{1}{3} =$

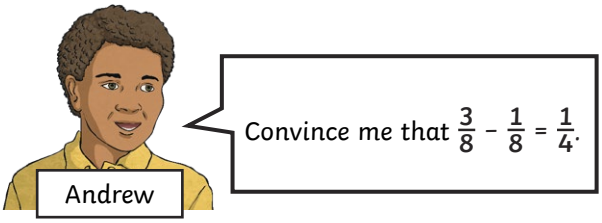
b) $\frac{8}{5} - \frac{7}{10} =$

1) Is each statement always, sometimes or never true? Explain how you know.

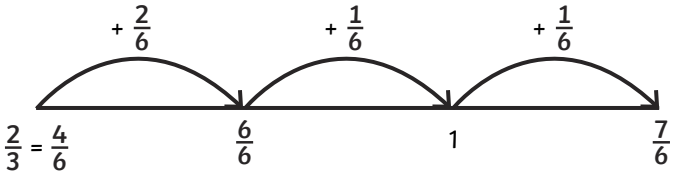
a) When you subtract fractions, you subtract both the numerator and the denominator.

b) You can't add or subtract fractions with different denominators.

2)



3) Afzol used a number line to find the difference between $\frac{7}{6}$ and $\frac{2}{3}$. Here is his working out:



$\frac{2}{6} + \frac{1}{6} + \frac{1}{6} = \frac{4}{6}$

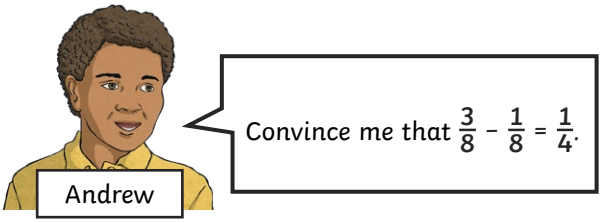
What mistake did he make?

1) Is each statement always, sometimes or never true? Explain how you know.

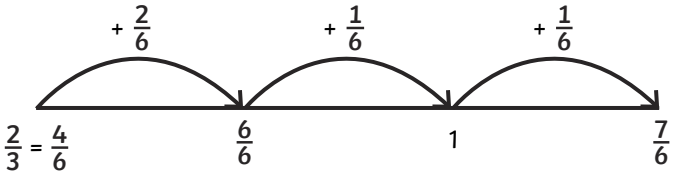
a) When you subtract fractions, you subtract both the numerator and the denominator.

b) You can't add or subtract fractions with different denominators.

2)



3) Afzol used a number line to find the difference between $\frac{7}{6}$ and $\frac{2}{3}$. Here is his working out:



$\frac{2}{6} + \frac{1}{6} + \frac{1}{6} = \frac{4}{6}$

What mistake did he make?

1) Fill in the missing numbers.

a) $\frac{\square}{\square} - \frac{2}{3} = \frac{5}{6}$

b) $\frac{3}{\square} - \frac{1}{4} = \frac{1}{\square}$

c) $\frac{6}{5} - \frac{\square}{10} = \frac{9}{\square}$

2) Clara is thinking of two fractions.

- Each fraction has a different denominator.
- They have a difference of $\frac{5}{15}$.
- Each fraction is less than one whole.
- The largest number that the denominators could be is 15.
- The fractions are in their simplest form.

a) What fractions could she be thinking of? Find all the different possibilities.

b) Explain how you can make sure that you did not miss any of the possibilities.

1) Fill in the missing numbers.

a) $\frac{\square}{\square} - \frac{2}{3} = \frac{5}{6}$

b) $\frac{3}{\square} - \frac{1}{4} = \frac{1}{\square}$

c) $\frac{6}{5} - \frac{\square}{10} = \frac{9}{\square}$

2) Clara is thinking of two fractions.

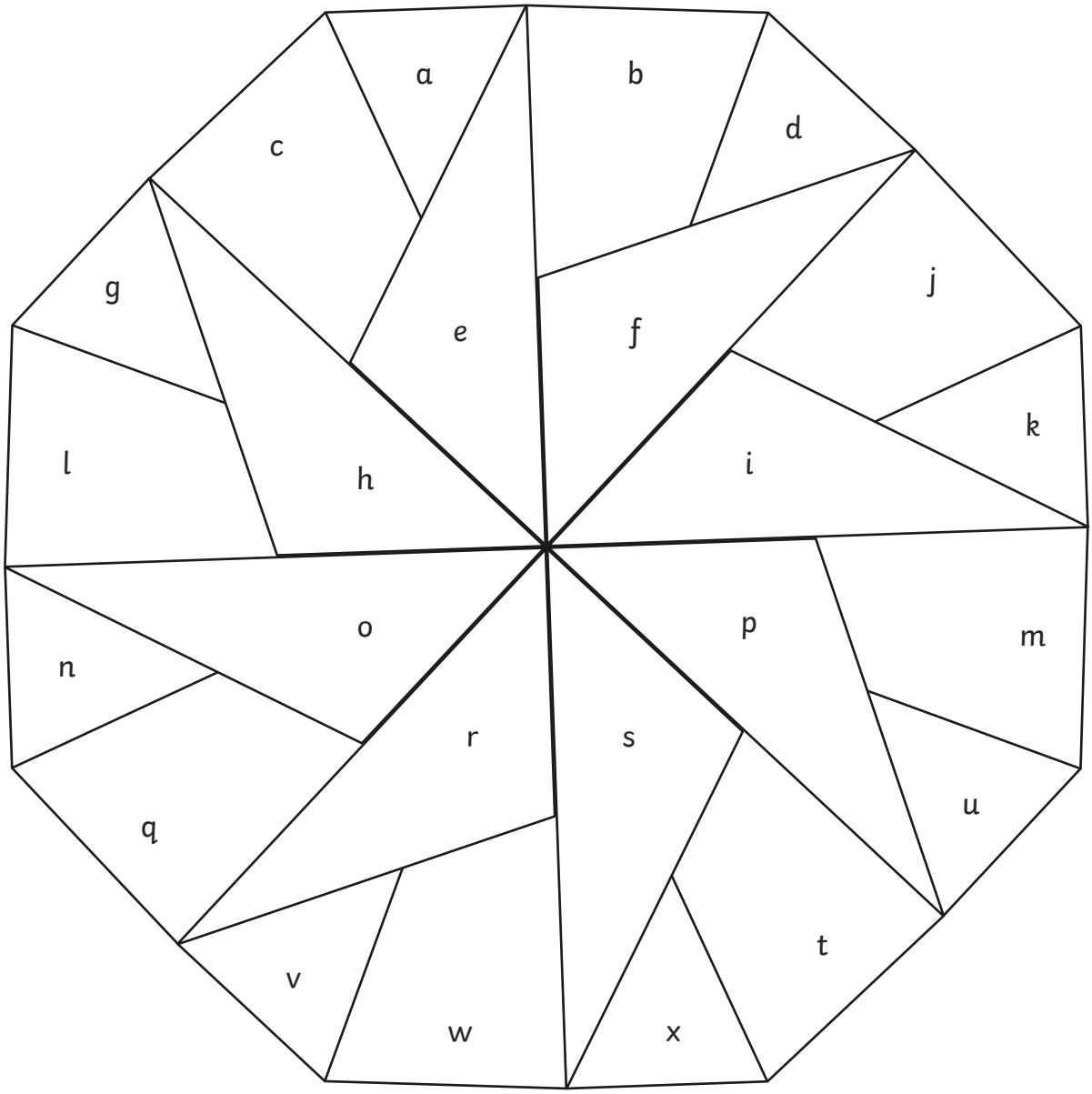
- Each fraction has a different denominator.
- They have a difference of $\frac{5}{15}$.
- Each fraction is less than one whole.
- The largest number that the denominators could be is 15.
- The fractions are in their simplest form.

a) What fractions could she be thinking of? Find all the different possibilities.

b) Explain how you can make sure that you did not miss any of the possibilities.

Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.



Choose the four colours for your stained-glass design:

- ☐ Less than $\frac{1}{2}$
- ☐ Between $\frac{1}{2}$ and 1
- ☐ Between 1 and $1\frac{1}{2}$
- ☐ Greater than $1\frac{1}{2}$

Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.

Identify if the answers to these calculations are:

- less than $\frac{1}{2}$
- between $\frac{1}{2}$ and 1
- between 1 and 1 $\frac{1}{2}$
- greater than 1 $\frac{1}{2}$

Colour each section of the stained-glass design based on your answers.

Stained Glass Section	Question	Answer	Size
e =	$\frac{7}{8} - \frac{1}{2} =$		
f =	$\frac{13}{8} - \frac{3}{4} =$		
b =	$\frac{10}{6} - \frac{1}{2} =$		
a =	$\frac{13}{4} - \frac{3}{2} =$		
s =	$\frac{7}{10} - \frac{5}{20} =$		
p =	$\frac{4}{3} - \frac{7}{15} =$		
m =	$\frac{31}{20} - \frac{2}{5} =$		
k =	$\frac{19}{9} - \frac{1}{3} =$		

Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.

Identify if the answers to these calculations are:

- less than $\frac{1}{2}$
- between $\frac{1}{2}$ and 1
- between 1 and 1 $\frac{1}{2}$
- greater than 1 $\frac{1}{2}$

Colour each section of the stained-glass design based on your answers.

Stained Glass Section	Question	Answer	Size
e =	$\frac{7}{8} - \frac{1}{2} =$	$\frac{3}{8}$	Less than $\frac{1}{2}$
f =	$\frac{13}{8} - \frac{3}{4} =$	$\frac{7}{8}$	Between $\frac{1}{2}$ and 1
b =	$\frac{10}{6} - \frac{1}{2} =$	$\frac{7}{6} = 1\frac{1}{6}$	Between 1 and 1$\frac{1}{2}$
a =	$\frac{13}{4} - \frac{3}{2} =$	$\frac{7}{4} = 1\frac{3}{4}$	Greater than 1$\frac{1}{2}$
s =	$\frac{7}{10} - \frac{5}{20} =$	$\frac{9}{20}$	Less than $\frac{1}{2}$
p =	$\frac{4}{3} - \frac{7}{15} =$	$\frac{13}{15}$	Between $\frac{1}{2}$ and 1
m =	$\frac{31}{20} - \frac{2}{5} =$	$\frac{23}{20} = 1\frac{3}{20}$	Between 1 and 1$\frac{1}{2}$
k =	$\frac{19}{9} - \frac{1}{3} =$	$\frac{16}{9} = 1\frac{7}{9}$	Greater than 1$\frac{1}{2}$

Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.

Identify if the answers to these calculations are:

- less than $\frac{1}{2}$
- between $\frac{1}{2}$ and 1
- between 1 and 1 $\frac{1}{2}$
- greater than 1 $\frac{1}{2}$

Colour each section of the stained-glass design based on your answers.

Stained Glass Section	Question	Answer	Size
c =	$1\frac{8}{10} - \frac{1}{2} =$		
i =	$\frac{9}{10} - \frac{3}{5} =$		
r =	$1\frac{1}{4} - \frac{8}{20} =$		
n =	$2\frac{7}{25} - \frac{2}{5} =$		
d =	$2\frac{1}{18} - \frac{1}{3} =$		
j =	$1\frac{9}{12} - \frac{2}{4} =$		
v =	$1\frac{5}{7} - \frac{5}{35} =$		
t =	$1\frac{3}{6} - \frac{6}{30} =$		

Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.

Identify if the answers to these calculations are:

- less than $\frac{1}{2}$
- between $\frac{1}{2}$ and 1
- between 1 and 1 $\frac{1}{2}$
- greater than 1 $\frac{1}{2}$

Colour each section of the stained-glass design based on your answers.

Stained Glass Section	Question	Answer	Size
c =	$1\frac{8}{10} - \frac{1}{2} =$	$\frac{13}{10} = 1\frac{3}{10}$	Between 1 and $1\frac{1}{2}$
i =	$\frac{9}{10} - \frac{3}{5} =$	$\frac{3}{10}$	Less than $\frac{1}{2}$
r =	$1\frac{1}{4} - \frac{8}{20} =$	$\frac{17}{20}$	Between $\frac{1}{2}$ and 1
n =	$2\frac{7}{25} - \frac{2}{5} =$	$\frac{47}{25} = 1\frac{22}{25}$	Greater than $1\frac{1}{2}$
d =	$2\frac{1}{18} - \frac{1}{3} =$	$\frac{31}{18} = 1\frac{13}{18}$	Greater than $1\frac{1}{2}$
j =	$1\frac{9}{12} - \frac{2}{4} =$	$\frac{15}{12} = 1\frac{3}{12} = 1\frac{1}{4}$	Between 1 and $1\frac{1}{2}$
v =	$1\frac{5}{7} - \frac{5}{35} =$	$\frac{55}{35} = 1\frac{20}{35} = 1\frac{4}{7}$	Greater than $1\frac{1}{2}$
t =	$1\frac{3}{6} - \frac{6}{30} =$	$\frac{39}{30} = 1\frac{9}{30} = 1\frac{3}{10}$	Between 1 and $1\frac{1}{2}$

Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.

Identify if the answers to these calculations are:

- less than $\frac{1}{2}$
- between $\frac{1}{2}$ and 1
- between 1 and 1 $\frac{1}{2}$
- greater than 1 $\frac{1}{2}$

Colour each section of the stained-glass design based on your answers.

Stained Glass Section	Question	Answer	Size
g =	$2\frac{1}{21} - \frac{1}{7} =$		
l =	$1\frac{10}{18} - \frac{1}{6} =$		
o =	$\frac{3}{5} - \frac{2}{15} =$		
w =	$\frac{11}{10} - \frac{3}{50} =$		
x =	$2\frac{1}{4} - \frac{7}{16} =$		
h =	$1\frac{7}{12} - \frac{2}{3} =$		
u =	$\frac{12}{6} - \frac{3}{12} =$		
q =	$1\frac{3}{6} - \frac{6}{24} =$		

Subtracting Fractions Stained Glass Designs

To subtract fractions with denominators that are multiples of the same number.

Identify if the answers to these calculations are:

- less than $\frac{1}{2}$
- between $\frac{1}{2}$ and 1
- between 1 and 1 $\frac{1}{2}$
- greater than 1 $\frac{1}{2}$

Colour each section of the stained-glass design based on your answers.

Stained Glass Section	Question	Answer	Size
g =	$2\frac{1}{21} - \frac{1}{7} =$	$\frac{40}{21} = 1\frac{19}{21}$	Greater than $1\frac{1}{2}$
l =	$1\frac{10}{18} - \frac{1}{6} =$	$\frac{25}{18} = 1\frac{7}{18}$	Between 1 and $1\frac{1}{2}$
o =	$\frac{3}{5} - \frac{2}{15} =$	$\frac{7}{15}$	Less than $\frac{1}{2}$
w =	$\frac{11}{10} - \frac{3}{50} =$	$\frac{52}{50} = 1\frac{2}{50} = 1\frac{1}{25}$	Between 1 and $1\frac{1}{2}$
x =	$2\frac{1}{4} - \frac{7}{16} =$	$\frac{29}{16} = 1\frac{13}{16}$	Greater than $1\frac{1}{2}$
h =	$1\frac{7}{12} - \frac{2}{3} =$	$\frac{11}{12}$	Between $\frac{1}{2}$ and 1
u =	$\frac{12}{6} - \frac{3}{12} =$	$\frac{21}{12} = 1\frac{9}{12} = 1\frac{3}{4}$	Greater than $1\frac{1}{2}$
q =	$1\frac{3}{6} - \frac{6}{24} =$	$\frac{30}{24} = 1\frac{6}{24} = 1\frac{1}{4}$	Between 1 and $1\frac{1}{2}$

Avery Template: Name Badge Label, 8 per sheet | Compatible Products:15395, 25395, 42395, 45395, 48395, 5395, 8395, 88395, 85395.

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		

Fractions | Subtract Fractions

To subtract fractions with denominators that are multiples of the same number.		
I can subtract fractions with the same denominator.		
I can convert between improper and mixed number fractions.		
I can use multiplication to change a fraction into an equivalent.		
I can subtract fractions with denominators that are multiples of the same number.		