THOMAS BULLOCK CE PRIMARY ACADEMY

Year 5

MATHS WEEK 5- DAY 2

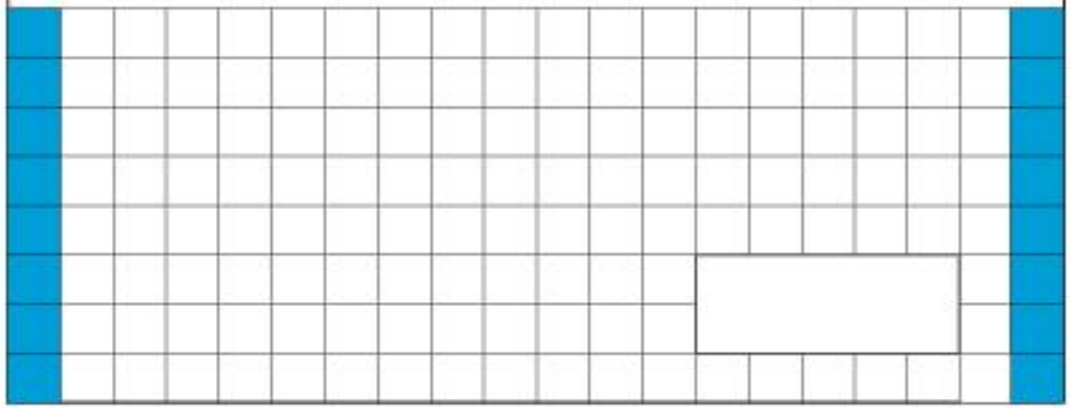
FRACTIONS PRACTICE WEEK

Challenge 1

You have 3 minutes to complete the next 3 questions!
Good luck

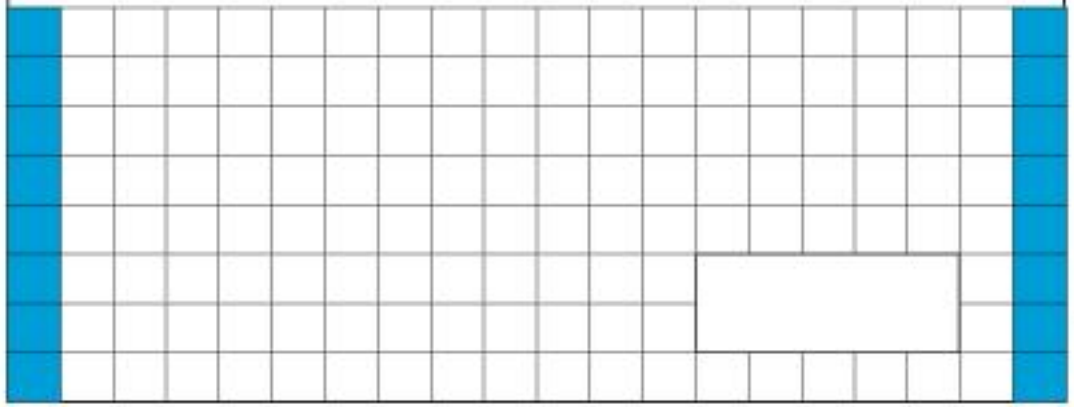
Challenge 1

5.812 - 4.63 =



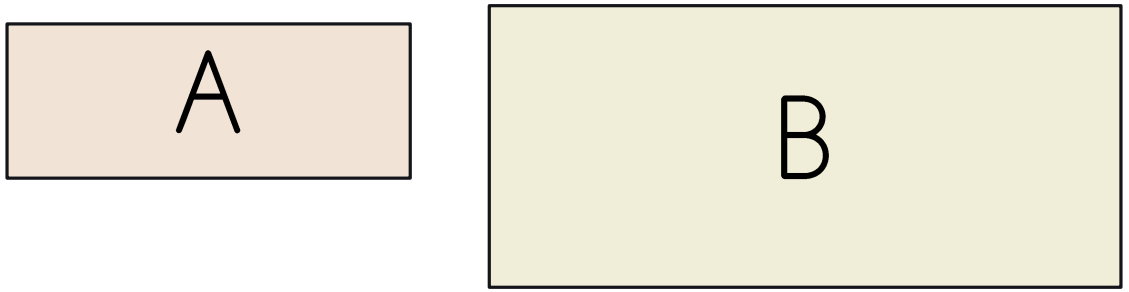
1 mark

56.8 - 3.24 =



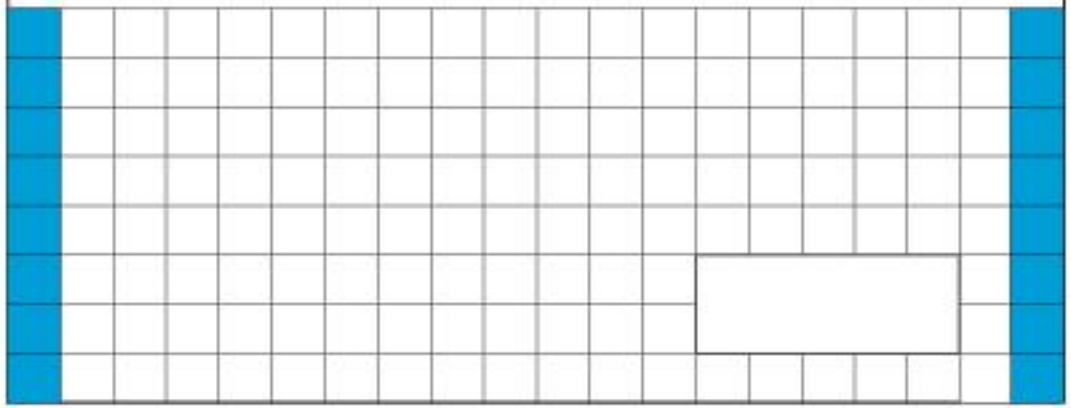
1 mark

3. Rectangle A is 15cm long and 5cm wide. Rectangle B is 12cm longer and 10cm wider than A. **Calculate** the **difference** in their areas.



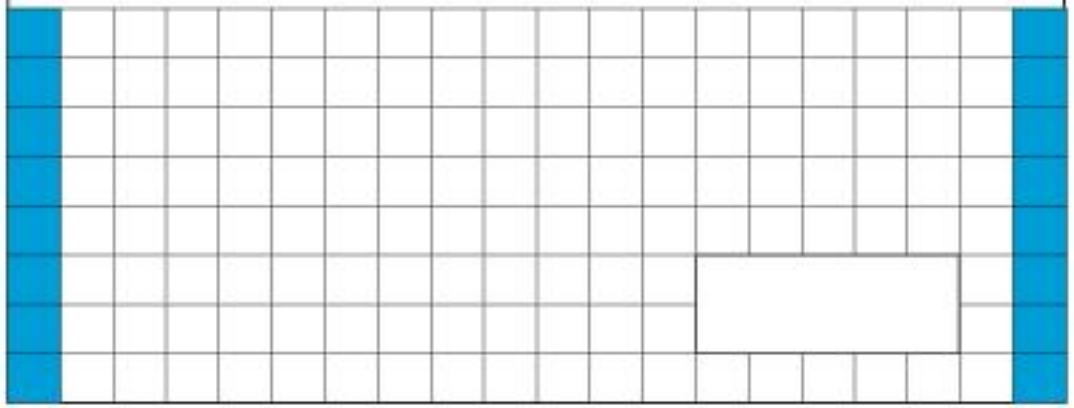
Challenge 1

5.812 - 4.63 =



1 mark

56.8 - 3.24 =



1 mark

3. Rectangle A is 15cm long and 5cm wide. Rectangle B is 12cm longer and 10cm wider than A. **Calculate** the **difference** in their areas.

A

B

Solutions

1. 1.182
2. 53.56
3. 330cm²

Challenge 2- Multiplication

This week please use the Times Tables Practice sheet for our Challenge 2.

How many did you get right?

WALT: Identify, name and write equivalent fractions of a given fraction, represented visually

Vocabulary Can you remember what these mean?

denominator
numerator
simplify
equivalent

Vocabulary: Fractions Year 5

Fraction Vocabulary

proper fraction
improper fraction
mixed numbers
numerator
denominator
decimal fraction
decimal place

A proper fraction is a fraction that is less than one, with the numerator less than the denominator e.g. 2/3

An improper fraction is a fraction that is more than one, with the numerator greater than the denominator e.g. 4/3. "They are top-heavy!"

A mixed number is a fraction that consists of an integer (whole number) and a fraction e.g. 1 2/3

A numerator is the top number in a fraction and shows how many parts you have . The denominator is the number on the bottom and shows how many equal parts the item is divided into.

e.g. ¾ 3 = numerator 4 = denominator

A decimal fraction is a fraction where the denominator is a power of 10 e.g.

4/10 = 0.4 34/100 = 0.34

Decimal place – this is the number of digits after the decimal point.

0.4 has one decimal place 0.34 has two decimal places

numerator

$$\frac{3}{4}$$

denominator

$$\frac{3}{5}$$

proper fraction

$$\frac{13}{7}$$

improper fraction

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

mixed number

Vocabulary: Fractions
Year 5/6

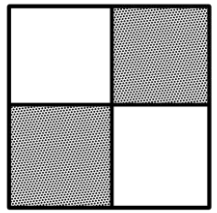
Fraction Vocabulary

proper fraction
improper fraction
mixed numbers
numerator
denominator
equivalent
half, third, quarter, fifth, sixth, tenth, hundredth, thousandth
convert

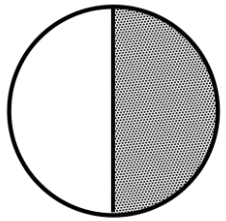
Equivalent fractions are two or more fractions which have the same numerical value but use different numerators and denominators e.g. ¾, 6/8, 12/16 and 300/400 are all equivalent fractions. To be equivalent, the numerators and denominators must increase/decrease in the same ratio e.g. "If the numerator is multiplied by 3, then the denominator must be multiplied by 3."

To convert a fraction means to change it from one form to another, without changing its size or value. You might convert (change) from a mixed number to an improper fraction, or vice versa.

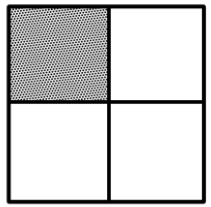
To simplify a fraction means to reduce it to a simpler form by cancellation of common factors e.g. 6/15 can be simplified to 2/5 as 3 is a common factor of 6 and 15.



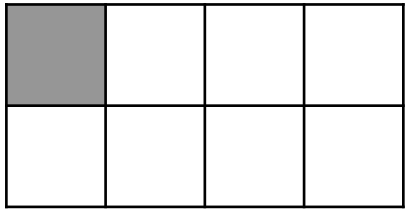
1/2



1/2



1/4



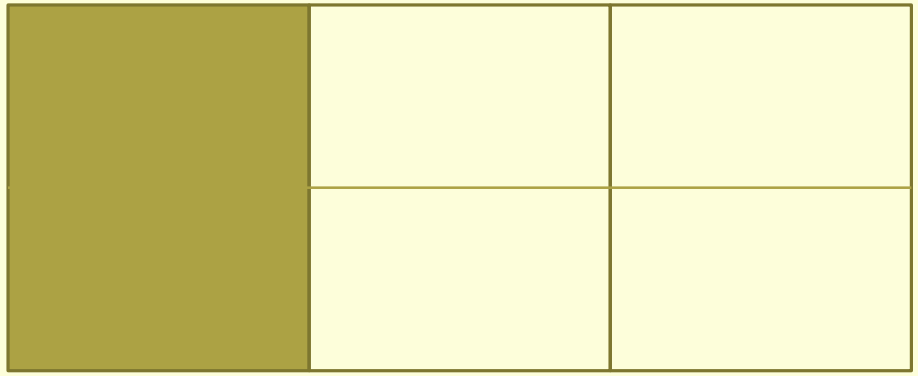
1/8

WALT: Identify, name and write equivalent fractions of a given fraction, represented visually

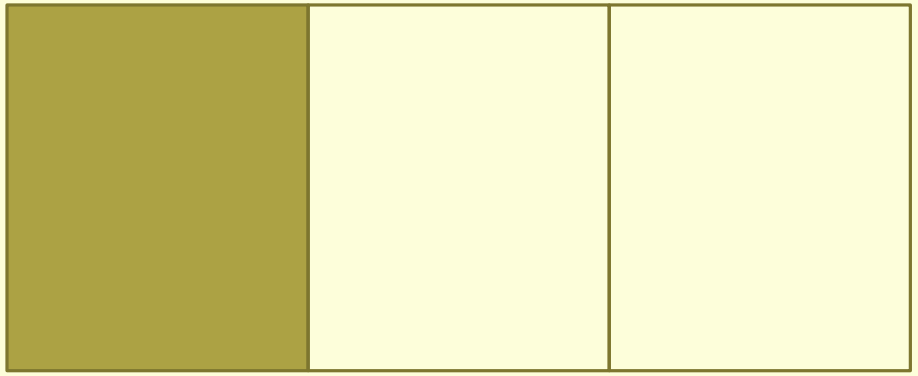
Equivalent fractions have the same value.

These fractions are **equivalent**. The rectangles are the same. The amount shaded is **equivalent**.

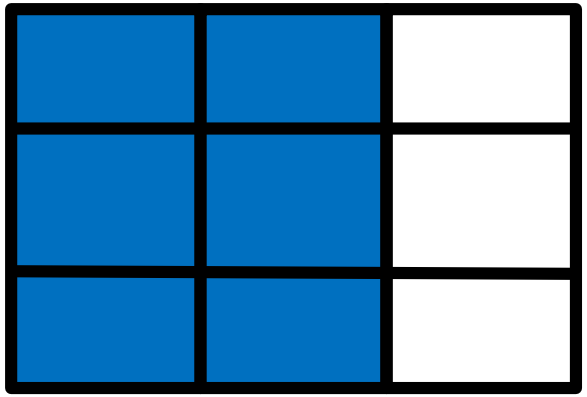
$\frac{2}{6}$



$= \frac{1}{3}$



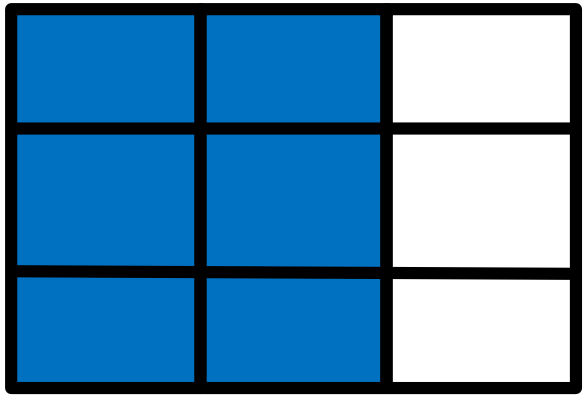
WALT: Identify, name and write equivalent fractions of a given fraction, represented visually



What fraction of the first shape is shaded?

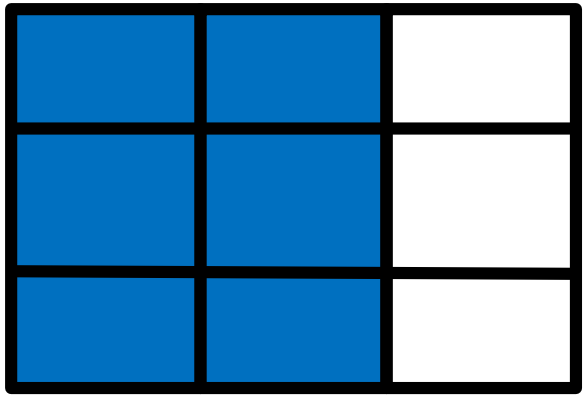
WALT: Identify, name and write equivalent fractions of a given fraction, represented visually

$\frac{2}{3}$



The shape is divided equally into three so the denominator is 3.
2 parts of the shape are shaded so the numerator is 2. So the fraction of the shape shaded is $\frac{2}{3}$.

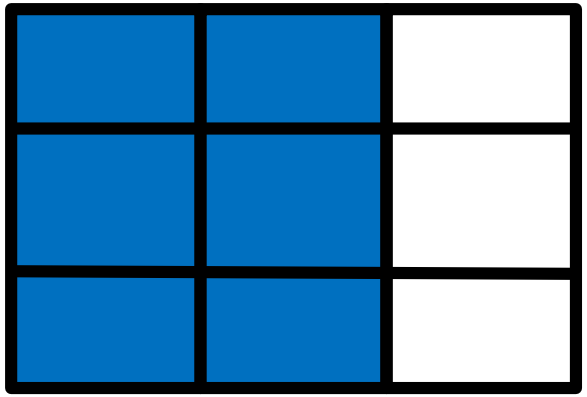
WALT: Identify, name and write equivalent fractions of a given fraction, represented visually



$\frac{6}{9}$

The same amount of the second shape is shaded but what is the fraction?

WALT: Identify, name and write equivalent fractions of a given fraction, represented visually



$\frac{6}{9}$

The shape is divided equally into nine, so the denominator is 9. 6 parts of the shape are shaded, so the numerator is 6. So the fraction of the shape shaded is $\frac{6}{9}$. Therefore $\frac{2}{3} = \frac{6}{9}$

WALT: Identify, name and write equivalent fractions of a given fraction, represented visually

When finding equivalent fractions, you may be asked to **simplify** them.

This means writing a fraction in its lowest terms when the numerator and denominator have no more **common factors.** At least one of the numbers is a **prime number.**

For example, simplifying $\frac{12}{24}$ or writing it in its lowest terms, gives the answer $\frac{1}{2}$.

WALT: Identify, name and write equivalent fractions of a given fraction, represented visually

- To ensure we do this correctly, we must find the factor which divides into both the denominator and numerator.
- We should try and find the **highest factor** to reduce the number of times we need to divide.
- The highest factor is 12 so we divide each number by 12.

$\frac{12}{24}$ **divided by 12 = $\frac{1}{2}$**

The numerator is 1.

1 is a prime number. We can only divide it by itself.

Therefore, we know $\frac{12}{24}$ has been written in it simplest terms.

WALT: Identify, name and write equivalent fractions of a given fraction, represented visually

The shape below is shaded. What fraction of the shape is shaded in its simplest form?

WALT: Identify, name and write equivalent fractions of a given fraction, represented visually

The shape below is shaded. What fraction of the shape is shaded in its simplest form?

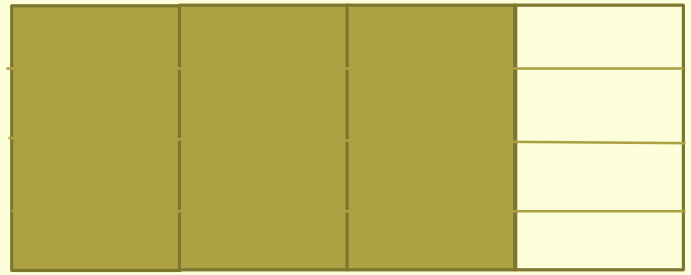
$\frac{4}{6}$ is shaded

$\frac{4}{6} = \frac{2}{3}$

Now your turn:

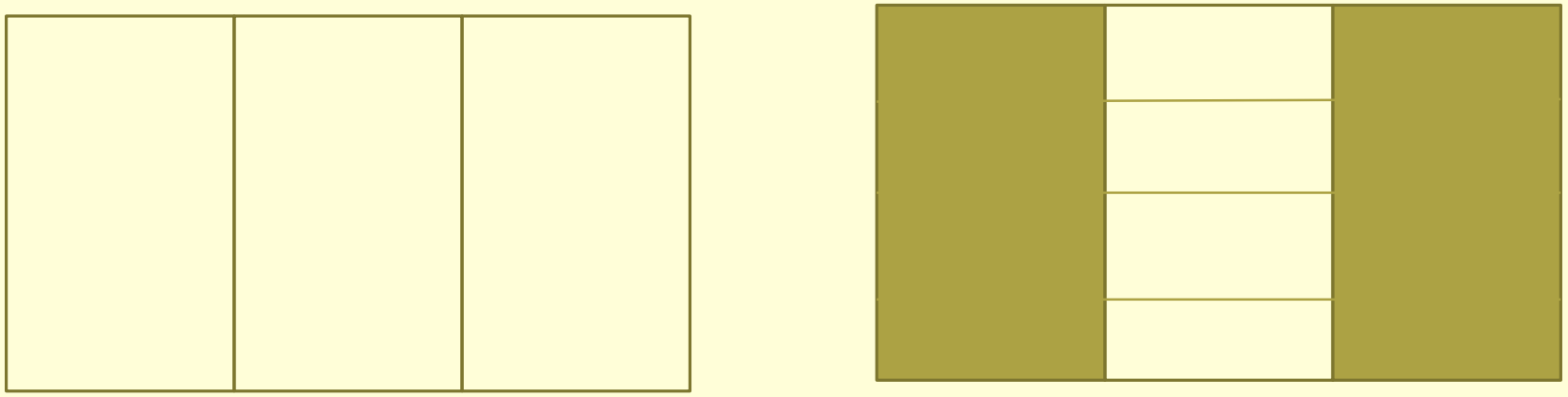
What fraction of these shapes is shaded?
Write down the equivalent fractions.

Now your turn:



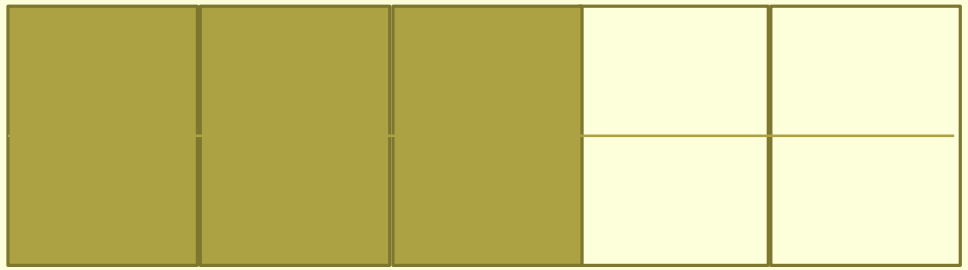
What fraction of this shape is shaded?
Write down the fraction in its simplest form.

What fraction of the first shape would have to be shaded to make these two fractions equivalent?



How do you know? Can you explain this?

Jack looks at the shape shaded below. He says the equivalent fraction in its simplest form is $\frac{4}{5}$.



True or false? Explain **how you know.**