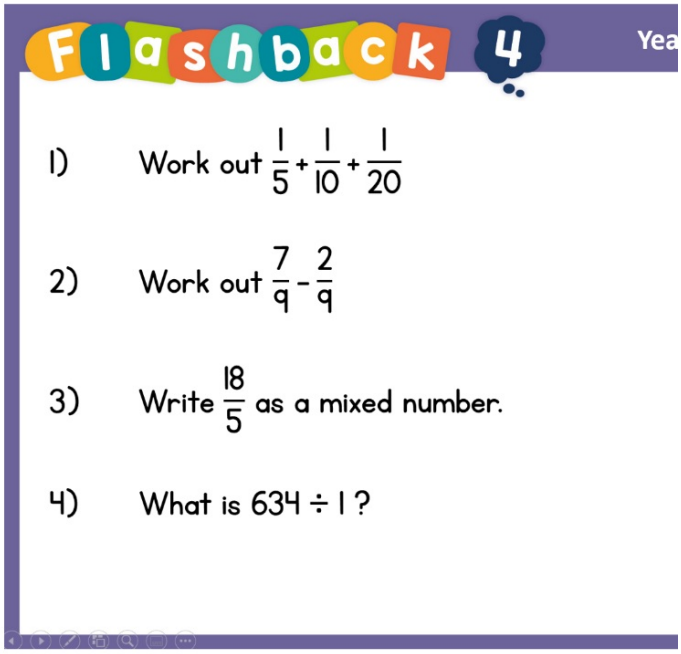
9.2.22

LO: To subtract fractions where denominators are multiples.
I know what calculation I need to do to find the difference.
I can subtract fractions where denominators are multiples.
I understand that I must use my knowledge of multiples to find a common denominator before I can subtract fractions.

Flashback 4.



Flashback 4

1) Work out $\frac{1}{5} + \frac{1}{10} + \frac{1}{20}$

2) Work out $\frac{7}{9} - \frac{2}{9}$

3) Write $\frac{18}{5}$ as a mixed number.

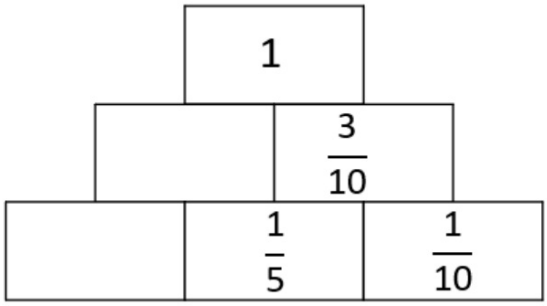
4) What is $634 \div 1$?

GET READY

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

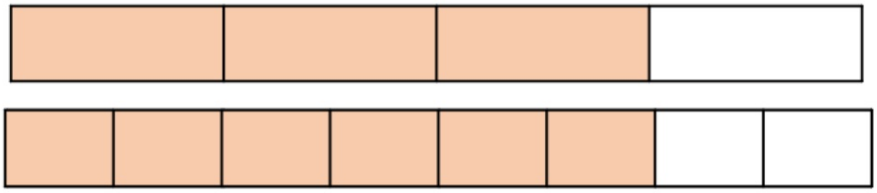
2) $\frac{5}{9} - \frac{1}{3} =$

3) Complete the addition pyramid – a number is the sum of the two numbers below it.



LET'S LEARN

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



How can we convert these fractions so they have the same denominators?

Don't forget to do the same to the top!

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

$\times 2$

$$\frac{6}{8}$$

Now that we have converted the fraction, how many eights do we have left?

On whiteboards, write the calculation and draw the bar model.

$$\frac{9}{15} - \frac{1}{5} =$$

How can we make the denominators the same?

The answer: $\frac{6}{15}$

What are 6 and 15 both a multiple of?
Knowing this will help us to simplify the fraction!

To match these fractions, we need to convert them first!

How can we make the denominators the same?

$\frac{5}{6} - \frac{12}{18}$

$\frac{9}{10} - \frac{2}{10}$

$\frac{7}{8} - \frac{1}{16}$

$\frac{15}{18} - \frac{12}{18}$

$\frac{9}{10} - \frac{1}{5}$

$\frac{28}{32} - \frac{2}{32}$

Have a go at questions 1 - 4.

1 Complete the subtractions.

Use bar models to help you.

a) $\frac{5}{6} - \frac{1}{2} = \square$

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

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

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

2 Match the equivalent calculations.

$\frac{3}{4} - \frac{3}{20}$	$\frac{10}{20} - \frac{3}{20}$
$\frac{4}{5} - \frac{3}{20}$	$\frac{16}{20} - \frac{3}{20}$
$\frac{7}{10} - \frac{3}{20}$	$\frac{15}{20} - \frac{3}{20}$
$\frac{1}{2} - \frac{3}{20}$	$\frac{14}{20} - \frac{3}{20}$

3 Jack walks $\frac{7}{9}$ km to school.

Aisha walks $\frac{2}{3}$ km to school.

How much further does Jack walk than Aisha?

4 Complete the subtractions.

a) $\frac{7}{8} - \frac{1}{16} = \square$

$\frac{5}{8} - \frac{1}{16} = \square$

$\frac{3}{8} - \frac{1}{16} = \square$

$\frac{1}{8} - \frac{1}{16} = \square$

5 On Saturday, Alex cycles for $\frac{2}{3}$ of an hour.

On Sunday, she cycles for $\frac{5}{12}$ of an hour.

a) How many more hours does Alex cycle on Saturday than

b) How many more minutes does Alex cycle on Saturday th

5 B's:
Brain
Book
Board
Buddy
Boss

Extension activity:

Which subtraction is the odd one out?

A $\frac{13}{4} - \frac{3}{8}$

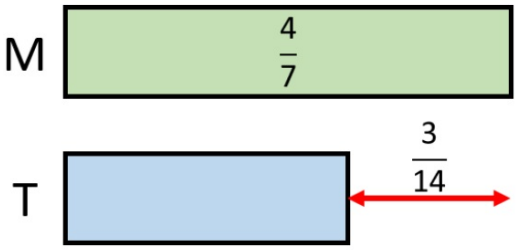
B $\frac{10}{3} - \frac{2}{9}$

C $\frac{23}{7} - \frac{1}{3}$

Explain why.

On Monday Whitney reads for $\frac{4}{7}$ of an hour.

On Tuesday she reads for $\frac{3}{14}$ of an hour less than on Monday.



For how long does Whitney read on Monday and Tuesday altogether?

What calculation do we need to do first?

How can we find the answer?

For how long does Whitney read on Monday and Tuesday altogether?

Tommy and Teddy both have the same sized chocolate bar. Tommy has $\frac{3}{4}$ left, Teddy has $\frac{5}{12}$ left.

How much more does Tommy have?

Have a go at question 5.

1 Complete the subtractions.

Use bar models to help you.

a) $\frac{5}{6} - \frac{1}{2} = \square$

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

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

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

2 Match the equivalent calculations.

$\frac{3}{4} - \frac{3}{20}$	$\frac{10}{20} - \frac{3}{20}$
$\frac{4}{5} - \frac{3}{20}$	$\frac{16}{20} - \frac{3}{20}$
$\frac{7}{10} - \frac{3}{20}$	$\frac{15}{20} - \frac{3}{20}$
$\frac{1}{2} - \frac{3}{20}$	$\frac{14}{20} - \frac{3}{20}$

3 Jack walks $\frac{7}{9}$ km to school.

Aisha walks $\frac{2}{3}$ km to school.

How much further does Jack walk than Aisha?

4 Complete the subtractions.

a) $\frac{7}{8} - \frac{1}{16} = \square$

$\frac{5}{8} - \frac{1}{16} = \square$

$\frac{3}{8} - \frac{1}{16} = \square$

$\frac{1}{8} - \frac{1}{16} = \square$

5 On Saturday, Alex cycles for $\frac{2}{3}$ of an hour.

On Sunday, she cycles for $\frac{5}{12}$ of an hour.

a) How many more hours does Alex cycle on Saturday than Sunday?

b) How many more minutes does Alex cycle on Saturday than Sunday?

5 B's:
Brain
Book
Board
Buddy
Boss

Extension activity:

Which subtraction is the odd one out?

A $\frac{13}{4} - \frac{3}{8}$

B $\frac{10}{3} - \frac{2}{9}$

C $\frac{23}{7} - \frac{1}{3}$

Explain why.

The p

?

Work

Extension activity:

Which subtraction is the odd one out?

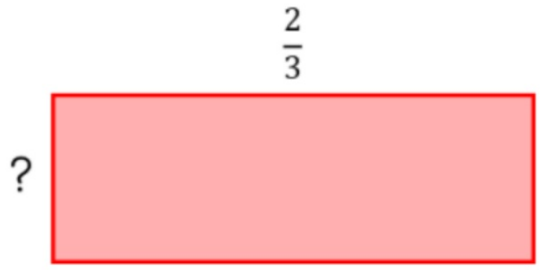
A $\frac{13}{4} - \frac{3}{8}$

B $\frac{10}{3} - \frac{2}{9}$

C $\frac{23}{7} - \frac{1}{3}$

Explain why.

The perimeter of the rectangle is $\frac{16}{9}$



Work out the missing length.

True or False?

Subtract fractions

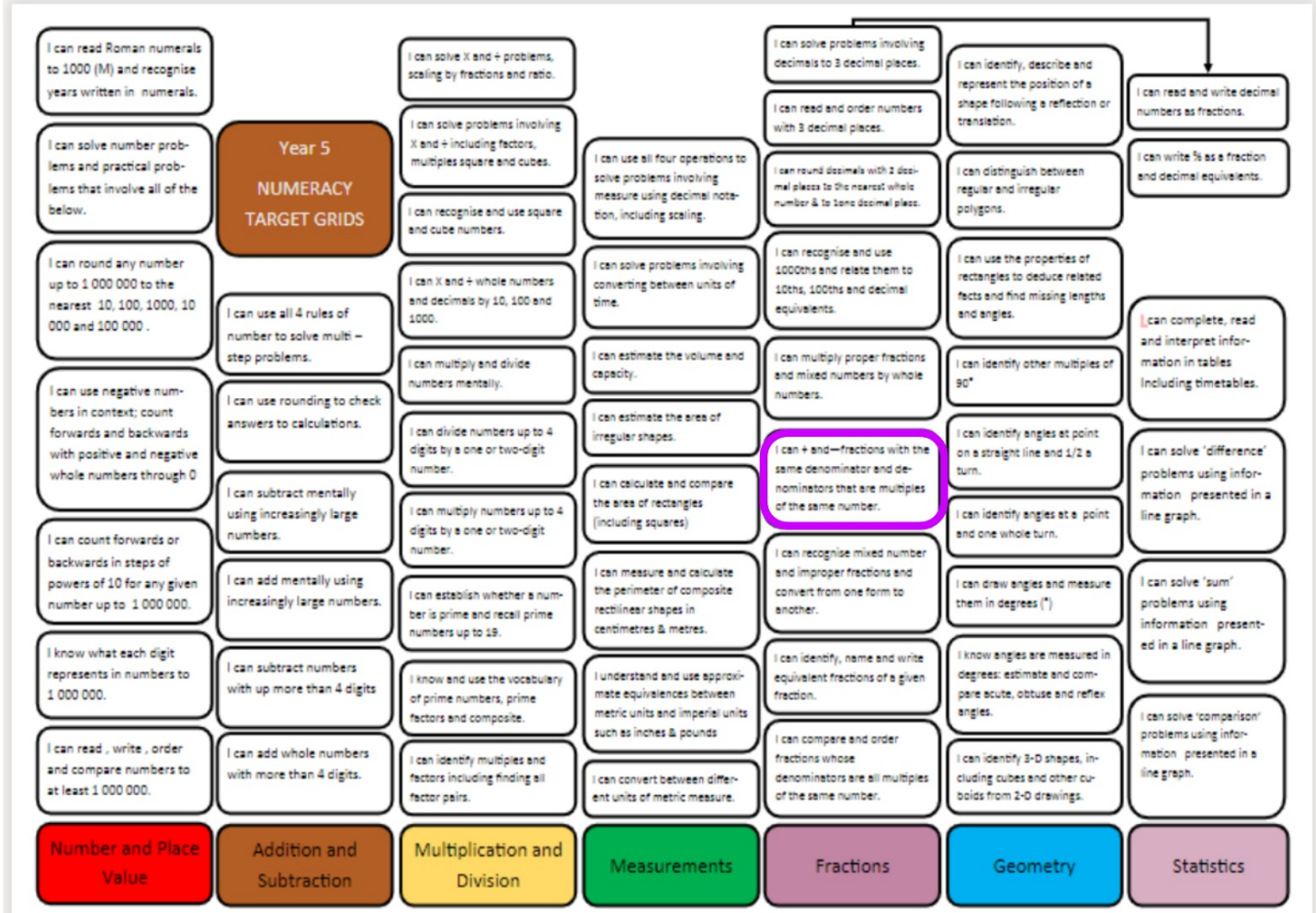
$$\frac{5}{6} - \frac{3}{4} = \frac{2}{2}$$

White Rose Maths

True or False?

False

$$\frac{5}{6} - \frac{3}{4} = \frac{10}{12} - \frac{9}{12} = \frac{1}{12}$$


Year 5
NUMERACY
TARGET GRIDS
Number and Place Value
I can read Roman numerals to 1000 (M) and recognise years written in numerals.
I can solve number problems and practical problems that involve all of the below.
I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 .
I can use negative numbers in context; count forwards and backwards with positive and negative whole numbers through 0
I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.
I know what each digit represents in numbers to 1 000 000.
I can read , write , order and compare numbers to at least 1 000 000.
Addition and Subtraction
I can use all 4 rules of number to solve multi – step problems.
I can use rounding to check answers to calculations.
I can subtract mentally using increasingly large numbers.
I can add mentally using increasingly large numbers.
I can subtract numbers with up more than 4 digits
I can add whole numbers with more than 4 digits.
Multiplication and Division
I can solve X and ÷ problems, scaling by fractions and ratio.
I can solve problems involving X and ÷ including factors, multiples square and cubes.
I can recognise and use square and cube numbers.
I can X and ÷ whole numbers and decimals by 10, 100 and 1000.
I can multiply and divide numbers mentally.
I can divide numbers up to 4 digits by a one or two-digit number.
I can multiply numbers up to 4 digits by a one or two-digit number.
I can establish whether a number is prime and recall prime numbers up to 19.
I know and use the vocabulary of prime numbers, prime factors and composite.
I can identify multiples and factors including finding all factor pairs.
Measurements
I can use all four operations to solve problems involving measure using decimal notation, including scaling.
I can solve problems involving converting between units of time.
I can estimate the volume and capacity.
I can estimate the area of irregular shapes.
I can calculate and compare the area of rectangles (including squares)
I can measure and calculate the perimeter of composite rectilinear shapes in centimetres & metres.
I understand and use approximate equivalences between metric units and imperial units such as inches & pounds
I can convert between different units of metric measure.
Fractions
I can solve problems involving decimals to 3 decimal places.
I can read and order numbers with 3 decimal places.
I can round decimals with 2 decimal places to the nearest whole number & to 1dp decimal place.
I can recognise and use 1000ths and relate them to 10ths, 100ths and decimal equivalents.
I can multiply proper fractions and mixed numbers by whole numbers.
I can + and—fractions with the same denominator and denominators that are multiples of the same number.
I can recognise mixed number and improper fractions and convert from one form to another.
I can identify, name and write equivalent fractions of a given fraction.
I can compare and order fractions whose denominators are all multiples of the same number.
Geometry
I can identify, describe and represent the position of a shape following a reflection or translation.
I can distinguish between regular and irregular polygons.
I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
I can identify other multiples of 90°
I can identify angles at point on a straight line and 1/2 a turn.
I can identify angles at a point and one whole turn.
I can draw angles and measure them in degrees (°)
I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
I can identify 3-D shapes, including cubes and other cuboids from 2-D drawings.
Statistics
I can read and write decimal numbers as fractions.
I can write % as a fraction and decimal equivalents.
I can complete, read and interpret information in tables including timetables.
I can solve 'difference' problems using information presented in a line graph.
I can solve 'sum' problems using information presented in a line graph.
I can solve 'comparison' problems using information presented in a line graph.