

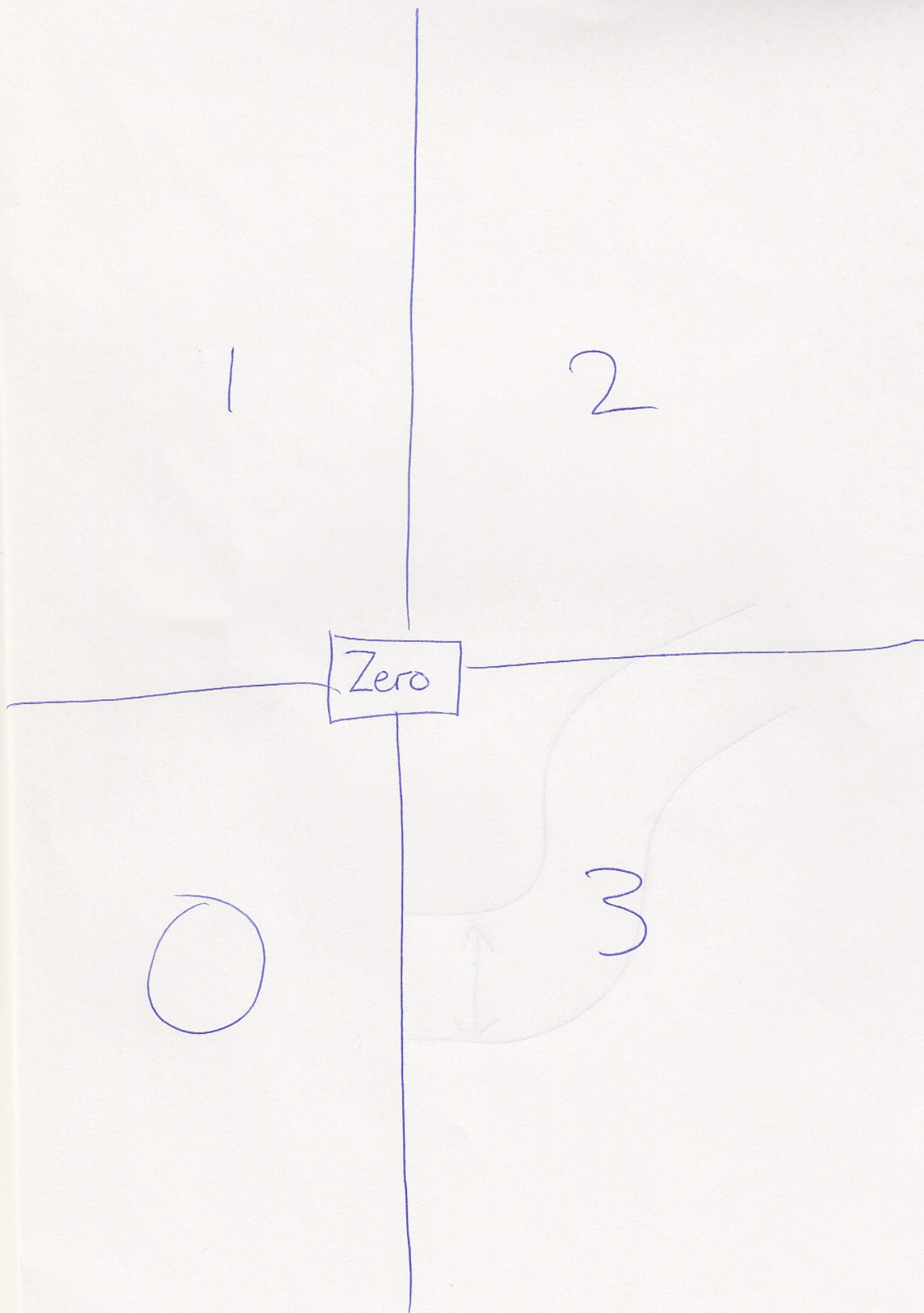
parallel

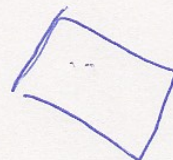
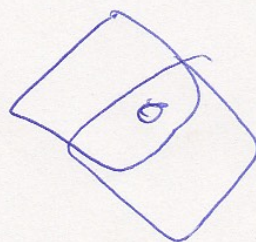
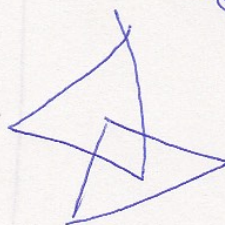
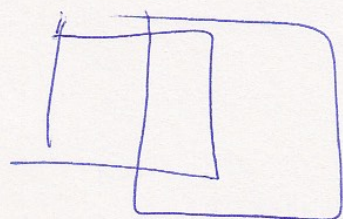
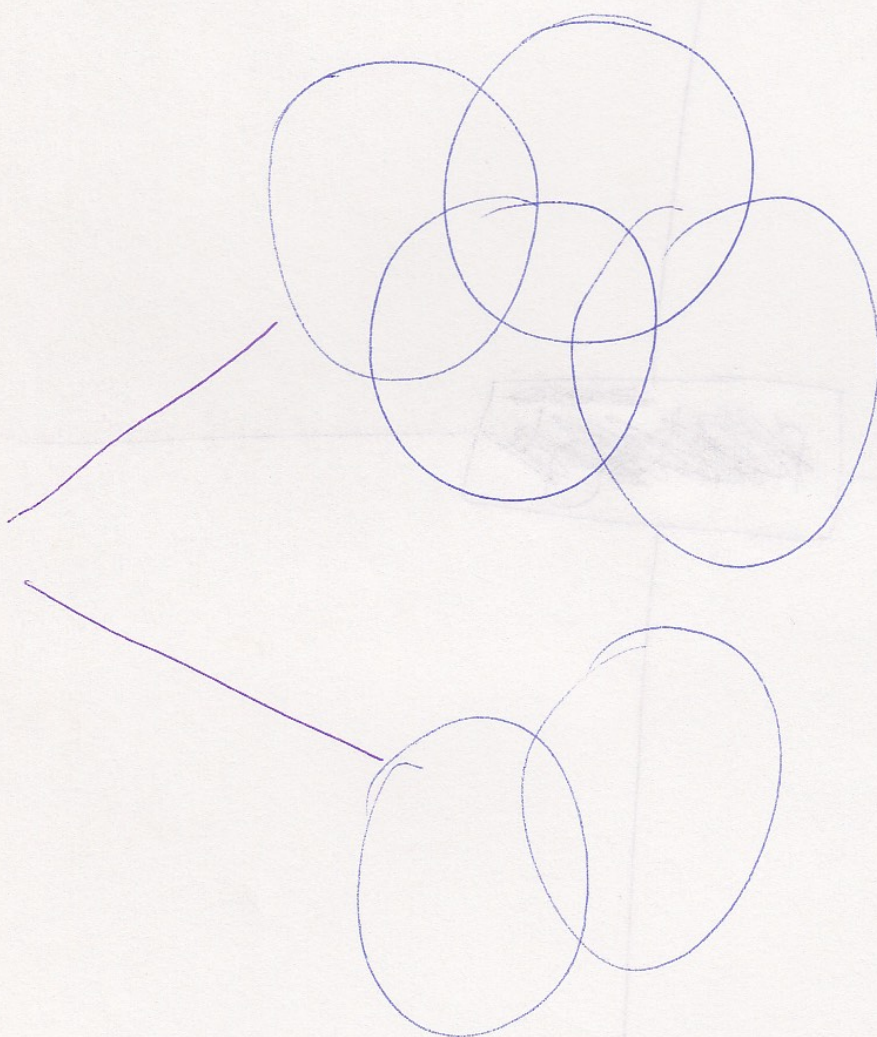
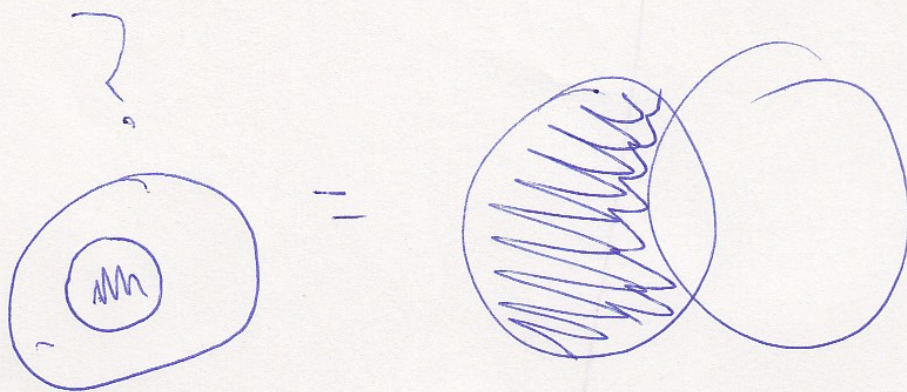
Two continuous straight lines that never meet.

Two lines that are side by side.

Two lines that make a right angle.

Two straight lines that are the same length.





Improper Fraction

A number with
a fraction and
a decimal.

Where the
~~denomi~~
denominator
is greater
than the
numerator.

Where the
numerator is
greater than the
denominator

Where you have
a whole number
and a fraction.

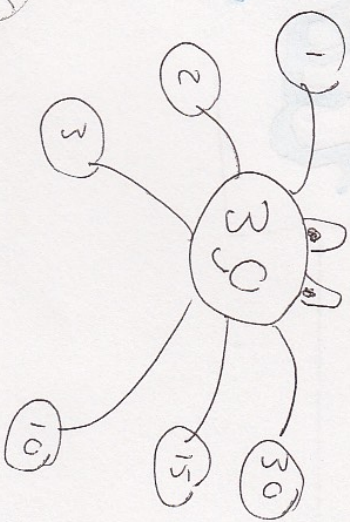
a → factorising expanded
 algebraic expressions
 by using brackets.
 This will simplify the
 expression.

$$\begin{array}{c}
 2(y+3) \xrightarrow{\text{expand}} 2y+6 \\
 \text{factorise} \swarrow
 \end{array}$$

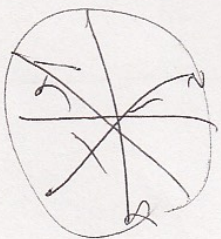
Factorise

Find factors of

a number.

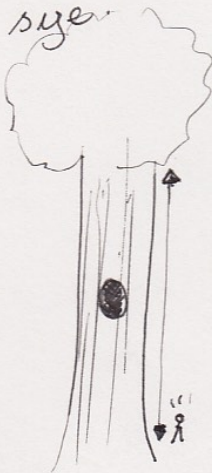


Hi I'm a
factor
bug



Mass

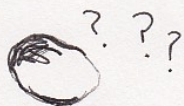
A mathematical term denoting a very large size.



A synonym for weight, measured in g and kg.



A measure of how much matter is in an object, commonly measured in weight.



Lots; e.g. a mass of triangles



↑
One triangle

↑
mass of triangles

MASS

religious ceremony

how much
matter is in an
object.

weight of an
object

group of
objects

↓
'many'

Cuboid. ~

A 3D shape with 6 faces
all of which are
rectangular.

A 3D shape with 6
faces. 2 of which are
square, 4 rectangles.

A 3D shape with 6
faces. 8 vertices,
12 edges.

A cuboid is
a cube.

rectangle

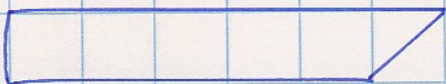
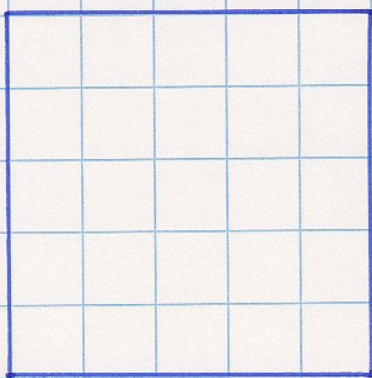
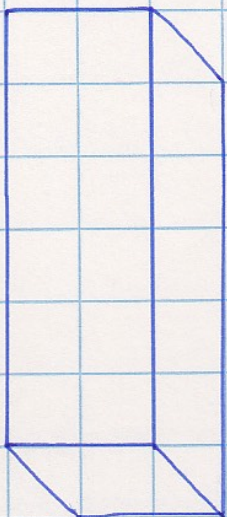
A four sided shape
with two right-angles

A ^{2D} shape with
five straight sides

A ~~so~~ four sided ^{2D}
shape which always
has two longer sides
and two shorter sides

A ^{2D} shape with four
straight sides where
the opposite sides are
the same length.

rectangle



Def $\rightarrow$ two dimensional shape with straight sides that meet.

Join

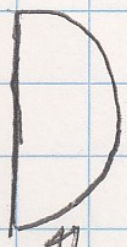
Polygon

non
example 1



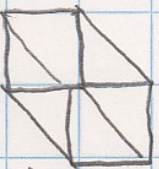
lines do not meet

Non eg. 2



Curved
Not straight

Non eg. 3



3D

Time

Def $\rightarrow$ To measure duration in different units such as years, months, days, hours, minutes, seconds.

Misconceptions:

Confusing units of measure $\rightarrow$ link to conversions of seconds/mins

Year $\rightarrow$ months $\rightarrow$ days

Non-exa Misconceptions:

- A sense of time/duration
example adults saying '1 more minute'
where in fact it lasts 5 or so minutes.

- Car journey 'Are we nearly there yet?'

Misconceptions:

24hr 12hr

Reading digital/analogue

am $\rightarrow$ 12 $\rightarrow$ pm
why?

Integer

A whole number that can be written without a fractional component

A positive whole number

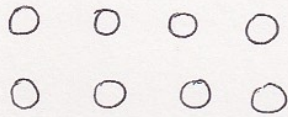
The result of a division which is a whole number

A number that has a fractional component.

Array ~

②

A row of dots/counters



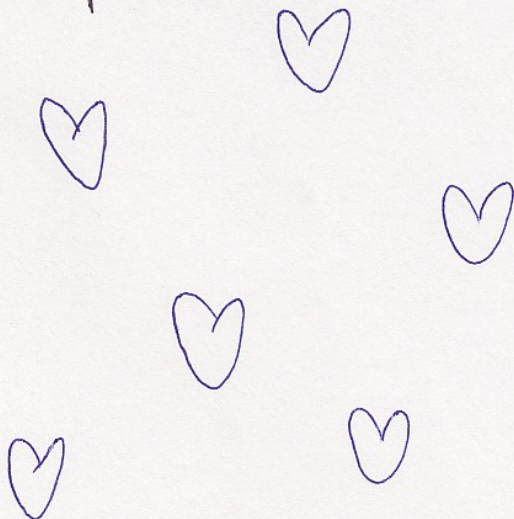
①

A pattern set in rows & columns, where each row is equal



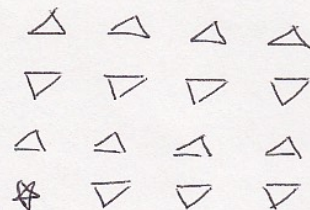
③

A pattern

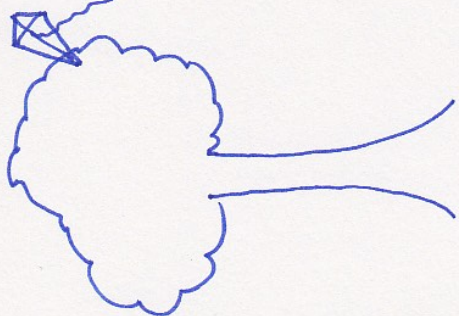
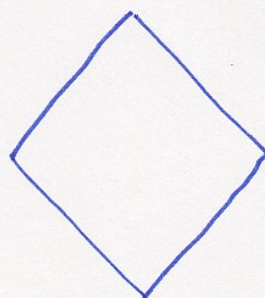
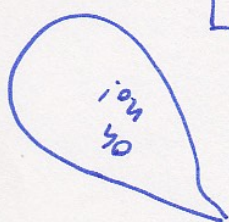
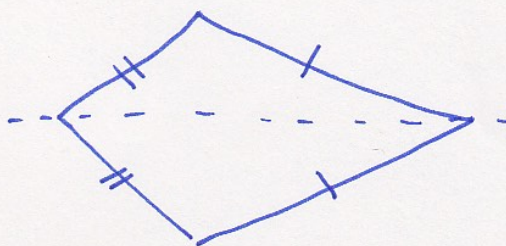
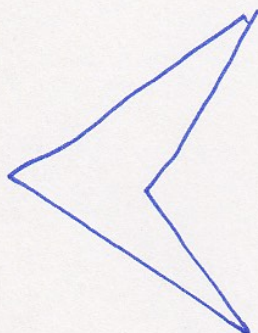


④

A pattern of the same colour or shape.



Kite



COMMUTATIVE

1. Two numbers that multiply together to get the same answer.

$$2 \times 3 = 6 \checkmark$$

$$6 \times 1 = 6 \checkmark$$

2. The inverse relationship between addition and subtraction.

$$10 - 4 = 6 \checkmark$$

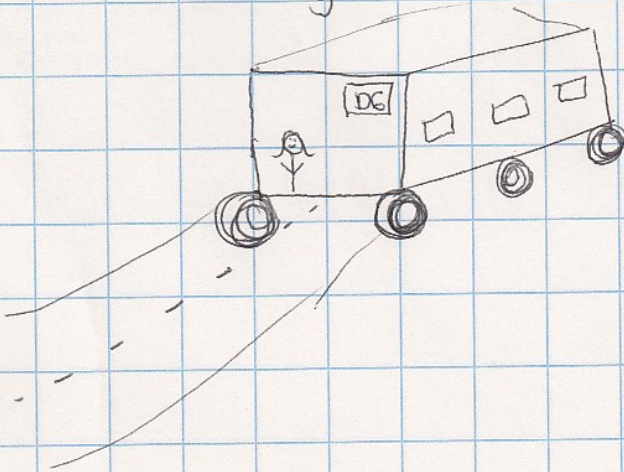
$$6 + 4 = 10 \checkmark$$

3. The ability to add or multiply numbers together in any order to result in the same answer.

$$4 + 6 = 10 \checkmark$$

$$6 + 4 = 10 \checkmark$$

4. When you see the numbers on the front of the bus you commute to work on.



make a prediction

informed guess

estimate

friend from estonia

random guess

Tally

1

Marks that
represent ^{one} a number

1 → 1

That it has to be
a vertical mark 1

It has to go on
a table?

Tally is just a
mark

Capacity

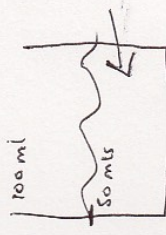
The maximum amount an object can contain.



The amount an object can ~~fit~~ hold.

The amount of space something occupies ~~or~~ that is enclosed within a container.

eg.



How full a container is.

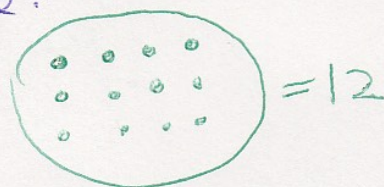
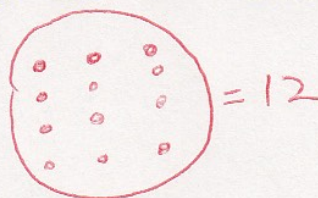
Commutative law

There are 2 commutative laws in Mathematics:

Commutative law of multiplication: In a multiplication number sentence you can multiply the numbers in any order as the end product will always be the same.

e.g: $3 \times 4 = 12$

$$4 \times 3 = 12$$

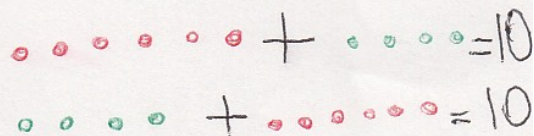


Commutative law of addition: you can add the numbers in any order. The end sum will always be the same.

e.g:

$$6 + 4 = 10$$

$$4 + 6 = 10$$



Commutative law does not apply to subtraction and division.

$$7 - 3 = 4$$

$$3 - 7 = -4$$

$$6 \div 3 = 2$$

$$3 \div 6 = 0.5$$

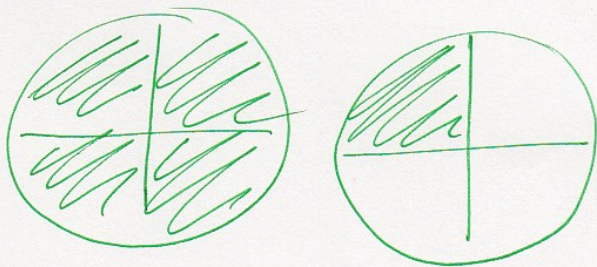
Fahmida and Thoslima

Bigland Green Primary School.



Improper Fraction

- ★ It is a whole number and a fraction.
- ★ The numerator is larger than the denominator.
- ★ The denominator is larger than the numerator.
- ★ The numerator & denominator add up to the total number of parts.



Commutative

and operation

① A number story that when completed in any order, gives the same total. E.g

$$\begin{array}{l} 4 + 1 = 1 + 4 \quad \checkmark \\ 3 - 2 = 2 - 3 \quad \times \end{array}$$

③ Same as inverse i.e. does the opposite.

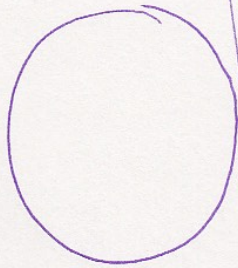
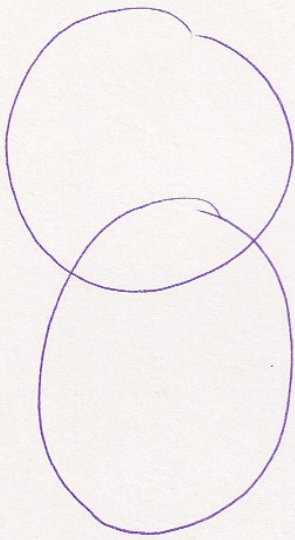
② When you change the order of your number story. E.g

$$\begin{array}{l} 4 + 1 \text{ or } 1 + 4 \\ 9 - 7 \text{ or } 7 - 9 \end{array}$$

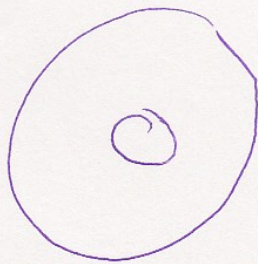
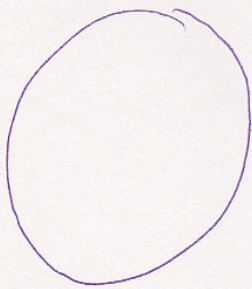
④ Two number stories that give you the same answer.

$$\begin{array}{l} 5 + 5 = 10 \\ 6 + 4 = 10 \end{array}$$

Sorting circles.



Venn
Diagram



A graphic organiser
which has a function
to sort anything
in a multiple of
ways, using interactions.